ANALYTICAL CREDITS

ALEXANDER WALL

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A STUDY IN BRIEF OF THE METHODS USED TO ACCUMULATE, TABULATE AND ANALYZE INFORMATION FOR THE PROTECTION OF LOANS AND CREDIT EXTENSIONS

By

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TO

A FRIEND OF MINE, WHO CAN AGREE WITHOUT FLATTERY AND CRITICIZE WITHOUT A STING

PREFACE

There is a vast difference between the fields of the bank and the commercial credit man. On the average the bank man probably deals in larger figures per risk and perhaps on this account has become more technical. At any rate he is often called less human by his commercial brothers.

If this be so then the writing of these chapters on credit, especially those that are aimed at the activities of the commercial credit man and his department, must be defended by the plea that they are observations on the credit activities of commercial credit men and executives as these activities have been disclosed during close personal association with such men.

It is farthest from the aim of the writer to pose in any way as a critic of commercial credit practises or to assume the position of teacher. The commercial and bank credit men, handling as they do the greatest business force of the country, should cooperate to the limit. This cooperation should include suggestion, analysis and criticism in connection with any credit department, either bank or commercial.

The writer learned much from association with the commercial credit man that was of the greatest value in his own departmental work. It is entirely in the spirit of productive cooperation that these pages on credit are offered to the commercial credit man. If there should appear to be criticism it is kindly meant, with the hope of stimulating deeper thinking by our whole profession.

A. W.

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CHAPTER I

THE GENESIS OF CREDIT

To talk intelligently on any subject we have to lay a foundation of sound understanding. One of the faults, born of success perhaps, of too many practical business men is that they taboo the laboratory of the economist. Such a man knows pretty well what the public wants to buy and he has also a fairly well defined idea as to the ability of his competitors and himself, to satisfy that desire. If the market is short of a commodity the people are asking for he is pretty apt to take advantage of the condition by raising his price and making an extra profit. In doing this he is taking advantage of the economic law of supply and demand and yet far too often if he is asked to make a study of political economy he turns a sour face and makes some tart remark about pure theory.

Some of the most untutored minds in business, however, are inherently the soundest economists in their thinking. It seems that every business decision they make is correct. These men and others trying blindly to copy them too often ridicule the true student of political economy. Their statement is, that business success is founded on sound judgment,—horse sense is often the

word used. As a matter of fact this is literally true. The study of economics is the application of sound business judgment, horse sense if you will, to the business statistics of the world and the development of laws, like the laws of nature, chemistry and the like, for the probable results to be expected from certain combinations of conditions in general business affairs. While some especially keen minds seem to sense both the conditions and their results subconsciously still even their success could probably have been bettered by accurate study. The chance of success of the average class of men can surely be so bettered.

Therefore, before plunging into the detail that surrounds the study of credit, as spoken of in the common vernacular of every-day business, and to establish a premise upon which to build our arguments, it becomes essential to discuss in very brief form some of the general theories of economics, money, banking and such other matters as are often perplexing because of the loose use of words and ill-understood meanings. This discussion, although purposely short and sketchy, is also intended to define clearly some of the words and terms often used in every-day conversation with incorrect or vaguely defined meaning.

WHAT IS POLITICAL ECONOMY

Political economy, or economics, is the analytical study of the production, distribution and consumption of the wealth of the world. To understand the vastness of the study we must first of all define clearly what we mean by wealth. We speak in common phraseology of a man being worth ten thousand or ten million dollars. We do not for a moment mean that he has in his possession that amount of silver, gold or paper dollars. It would be a surprising thing if a man worth a million dollars really had a thousand coins or token in his immediate possession,

if the stories of the small amount of pocket money carried by our wealthy men are to be believed. Wealth is far more than silver dollars. It has been defined in many various phrases but the following contains the essential qualifications to establish the presence of the character of wealth in any object. "Wealth consists of all useful or agreeable things that possess exchangeable value." Apply the test of this phrase to the condition of any substance and its wealth characteristics will be measured. The air we breathe is mighty useful, yet under normal conditions, it is not wealth, although without it we could not live. Under abnormal conditions even the ordinary every-day air might be wealth. A man trapped in a sunken submarine would give a good deal for a container of compressed air that he could release little by little and so live until the boat was raised. If any one had such a container so filled and could reach the imprisoned man, that air would become, because it had exchangeable value, wealth indeed. Examples of this kind could be multiplied ad infinitum, but to no real purpose for the busy man. It is enough then to say that the characteristic of wealth depends upon exchangeability, and the degree of the wealth element upon the extent of that exchangeability.

Business embraces the forces that produce wealth, transport it, distribute it and, by good trading and manufacture, increase it. The natural forces that help or hinder the business man in any of these steps make up the forces studied under the name of economics. Hence from a purely practical standpoint business and political economy are twin brothers.

DEVELOPMENT OF MONEY

We can not fully understand what "money" means, giving it its full significance but not letting the word discourage our better judgment, unless we follow its development. The world

did not start doing business as it does to-day, either in volume or in manner. There is one basic vital principle however that gave birth to trade which is the backbone of all business to-day just as it was in the time of Cæsar or Solomon. That is the desire to possess something, a desire so strong as to make one willing to surrender something already owned to possess it.

In the earliest times, we can imagine one man having some article, such as a stone ax, which another man wished to own. If at the same time this second man had something, say a bone fish-hook, that the first man wanted, a trade on some basis, could be effected. This swapping of goods was the first sort of business, and the conducting of business along this line is known as barter. It is crude in the extreme but has been a source of the production and exchange of much wealth. Even to-day explorers can secure from ignorant natives much of real value by swapping highly colored ribbons, bells, or even gum-drops, for the natural products of the country.

Barter was the first method then of business. It had one serious drawback which prevented any very rapid or great development of business under such a method. To effect an exchange of goods on such a basis it was necessary for the second man to have what the first man wanted and at the same time want what the first man had to exchange. Economists have spoken of this condition as the double necessity of wants. In a very primitive society with few and simple wants this method sufficed. But as society developed and wants became more varied it was necessary to find some other method of effecting these exchanges. If this had not been possible of accomplishment every one to-day would have had to have a veritable mail-order house at his back all the time to supply the wants of the person with whom he wished to trade.

MONEY

The mechanism that did away with the double necessity of wants was money. It was not at all the same as the money of to-day, but was an article, at first, of universal desirability so that it could always be easily retraded. It was also in some degree divisible into units of varying degrees of value. Cattle were one of the first forms of money. A man having an article for trade would no longer seek a man wishing that particular article and having an article he himself wanted. He would trade his article with the first man that wanted it and could give him enough cattle, cows, sheep or goats, to satisfy his opinion of its value. These cattle he would then retrade with some one having that article which he himself wanted. In this manner cattle performed the services now performed by the money of to-day. They performed the service well in the state of society then existing. But as society again became more complex, as trade reached farther and farther away from home circles, cattle and similar goods became too cumbersome and other forms of money became more desirable and indeed necessary.

STANDARD OF VALUE

If exchanges were to be made not for the exact goods finally wanted but for some common medium of exchange or money, then it became increasingly important that some standard be arranged for, so that the value of the medium could be accurately measured. Cattle money, while crudely serving the purpose, had an inherent tendency toward fluctuation within itself. In a time of famine the food value of the cattle increased all within itself, and in times of plenty the food value declined as within the commodity value of the cattle themselves. In addition to

this the supply of cattle was a variable quantity, therefore affecting its intrinsic and basic value. This character of internal or individual value variation unsuited cattle for any wide money service, and some other medium as between buyer and seller became necessary.

It became evident that any article or substance, to serve as a standard, must possess several important qualities. It must be sufficiently rare so that it would not be easy of attainment. It must be susceptible of easy division into parts so that quantities of varying size could be used for standards of smaller unit value. It is not necessary for our purpose to trace the entire development historically. It will do to state, what is now a well recognized fact, that gold through the trials of the ages has been adopted as the standard of value. This means that a price has been set by law on a certain amount in weight of gold of a certain chemical purity.

The adoption of the gold standard means that all money is measured by its exchangeability for gold. A five-dollar gold piece is worth five dollars intrinsically because if melted down the metal will be worth that much. This does not hold true of other moneys in our currency system except as they, by act of Congress or otherwise, are redeemable in gold coin which in its turn is intrinsically worth a certain amount.

By substituting metallic currency for cattle or other currency a great step in advance was made. This was true because the monetizing of a certain definite weight of gold at a certain price eliminated nearly all internal fluctuation in base price value of the money itself. That is, by stabilizing the gold dollar as so much gold by weight and giving this a certain fixed price, the value of other goods as expressed by units of the standard of value rises or falls. This was very noticeably true during the

period from 1914 to 1920 when prices in general have risen enormously but the mint price of gold has remained at so many dollars per ounce.

But even the substitution of a metallic standard of value, of low internal value variation and great condensed value, was not sufficient and the needs of industry and commerce demanded a more flexible and less cumbersome method of effecting the exchanges,—a new medium of exchange more perfect in its economic performance of service.

CREDIT

The substitute that was developed was credit, the subject that we are to discuss in this book. In order to do this with a foundation of common understanding it becomes absolutely essential to develop an intelligent definition of the term credit.

In making his definition nearly every economist uses some slightly different wording. They all, however, have several points or characteristics in common. The first of these is belief, faith, trust or some similar characteristic. Indeed the meaning of the word credit implies belief in that it is a direct adaptation of the latin word *credo,* I believe. The second of the points held in common by the definitions, is the present sale or transfer of ownership of some form of wealth or goods or personal service without immediate payment. The third is, that payment is deferred until a future time. A fourth, not so general, is a stipulation of the unit of measure of value and the number of units that will be paid. A fifth, is a declaration that through the qualities of credit a power for accomplishing the transfer is present. With these qualities in mind we can frame a commercial, if not academic, definition of credit as follows: Credit is the power to secure the present transfer of the ownership of wealth, expressed

or measured in dollars or other monetary standard, by a promise of the buyer to pay an equivalent at a future time, based on the confidence of the seller in the ability and willingness of the buyer to meet such obligations promptly.

IS CREDIT POTENTIAL POWER OR EXECUTED ACT?

Even after accepting a definition of what credit is, as defined, there are some who raise the argument as to whether credit is an unused potential power or an already finished transfer. Such a matter is perhaps only a difference in the choice of words and phrases, but it is a point upon which any one discussing the science of credit should be very clear so as to avoid future misunderstanding. Some very intelligent business men argue that credit does not exist until the goods have been transferred and the debt created. To them credit is not a power, but measures only the extent to which goods have been transferred. In no real respect does this meaning then differ from the meaning attached to the word debt. Such a meaning would mean that a man's credit was always just the amount of his debts.

From the commercial standpoint at least it seems more reasonable to consider credit as a power, perhaps the limit of power, of an individual or corporation to secure goods based on the belief of the seller that future payment will be directly made. We can then think of the credit of any one as being something potential that can be used and accurately counted on as economically equivalent in power to capital, in the running of a business. That part which has been used becomes debt and the remainder is the residue of power. This conception also adds to the dignity of the credit man because he is the controller of a force rather than the mere watch dog of a burying-ground.

HOW IS CREDIT CREATED?

The main manufacturers of credit are the banks. They do not have merchandise to sell as do their commercial brothers. They act as the collectors of funds and, based upon a system of reserves and the making of loans through which deposits are created, they manufacture a credit power. But while banks do not deal in merchandise, being primarily manufacturers, jobbers and retailers of credit, still they are not the only creators of credit. In fact a very large part of the credit of the country is created by commercial credit men. In banks the commercial credit, as differentiated from funded credit, is represented by their bills receivable in file and by their acceptance activities. The credit made by the commercial man is represented by the accounts and bills receivable on the books of his company or acceptances in his portfolio. In both these instances these records represent the consumed part of the credit force, the part already used. The unused, still potential credit power is a somewhat indefinite amount in excess of this. In banks it is rather customary to establish lines of credit for the borrowing customer up to which he may extend his borrowings until a readjustment of the line. Many commercial credit men also analyze an account and establish the limit to which they will allow an account to expand. In the establishment of these credit lines and credit limits, known in most instances to the borrower or customer, the bank and commercial credit man create credit power. This will be further discussed in a chapter on Commercial Paper.

THE EXTENT OF THE USE OF CREDIT

While it is very difficult to estimate the entire extent of the use of credit many statisticians estimate that over ninety per cent. of the entire commerce of this country, at least internal com-

merce, is transacted entirely through the use of credit. From this it can be seen that a new force of exceeding flexibility has been substituted for the metallic money which in itself was substituted for the less efficient cattle currency, which superseded barter.

Money has been defined as the medium of exchange. The question then comes up as to whether credit is money. It would be a futile thing to do, the starting of a debate on this point. It would result only in a mass of hair-splitting definitions and shading of explanations. From the ground of plain business it does not matter much whether credit is called money or not, the fact remaining that credit does probably ninety per cent. or more of the work of money and also constitutes the security against which quite a large percentage of our bearer money notes are issued. The notes of the Federal Reserve system are largely based on the commercial credits of the country resting in their issue on a moderate reserve of gold, the standard of value, and final reserve. So whether we enter this argument or not let us remember that the greatest part of our exchanges of wealth, over nine-tenths, are affected by the use of credit, the maintenance at par of which is the individual duty of each credit man.

LIQUIDITY OF CREDIT ESSENTIAL

While, so far, this chapter has been perhaps a trifle academic in the discussion of more or less abstract theories, historical suggestions and the like, it has been so in the firm belief that some such background is absolutely necessary to the intelligent study of the more commonplace every-day practises of the credit man.

The step from direct swapping of goods through barter, receiving full payment at the time of transfer, to the modern highly developed credit system is enormous. No such commer-

cial development as the last hundred years has seen could possibly have happened with only a state of barter, nor yet with cattle money, or even metallic currencies. Credit, in its extreme flexibility and its sensitiveness, made possible this expansion of production and development of commercial enterprise through transportation and financing.

But this step has brought with it heavy personal responsibilities. Credit must be kept liquid. It must be kept liquid because only in this state can it be serviceable to the commercial world. If credit becomes fixed or "frozen," as the expression of common parlance says, then it can not function as it should. It may be logical then to ask when credit is liquid and when it is fixed. Credit is liquid when its buying power has been invested in goods or services that can be disposed of by the buyer, in a reasonably short time, placing him in funds with which to settle his own debts when due. Credit is non-liquid, fixed or "frozen" when its buying power has been used to secure non-liquidating assets that can not, in the normal run of things, be disposed of quickly. It sometimes happens that commercial credit, or credit power that has been created or extended for the purpose of commercial activities, is used to purchase plant, machinery, etc. Of course such assets are often quite as necessary to the success of a business as are the liquid assets, but their nature is such that they should have been, with very few exceptions, purchased by the funds of the stockholders or owners and represented by the capital and surplus or net worth of the company or partnership. Methods of measuring the conversion of condition from strictly liquid to more or less non-liquid will be discussed in the chapters on Statement Analysis. For the present the statement should be made, and made strongly, that the maintenance of liquidity, not seeming but real liquidity, both in the condition of one's custom-

ers and of one's own business, is of the highest importance. Actual instead of fancied liquidity is the greatest prevention of over-expansion.

CRISIS, PANIC, DEPRESSION

There has been a deal of trouble caused by the thoughtless use of these three words. In common corner conversation it is not at all uncommon to hear all three words used absolutely indiscriminately. This idle thoughtless use of words, especially by credit men who are supposed to be leaders in the examination of business conditions, should be heartily condemned. It is perhaps difficult to give an exact definition that can not be assailed. But it is possible to speak of these three conditions in such a way that the importance of a differentiation can easily be seen and a fairly accurate use of the words assured.

There are boom times in business when every one is very optimistic, when the public is buying, when failures are few, small and with little loss. No one would normally call this a crisis, yet it may be the first stage of a crisis, for a crisis in business affairs is very similar to a crisis in sickness. It is a condition of climax of economic forces good or bad and marks the turning point of commercial or business balance. It may mean that matters will grow acutely worse, with failures very prevalent, and lead to bad business conditions. It may mean, however, that sound business judgment and proper management will bring about a readjustment of the unbalanced economic conditions that will stabilize business again on sound proportions and result in better business. There are major and minor crises and many have been passed through successfully. The patient does not always die and the credit man should bear this in mind both individually and collectively. One of his duties to the whole

community is to assist in a proper understanding, and on every occasion where he speaks of crisis he should, unless he is sure his hearers fully understand, be careful not to leave any misapprehension as to just what he means.

A panic is generally a crisis turned for the worse. It is almost always the result of a crisis in which the master financial doctor has made grave errors that have instilled fear into the mixture of critical affairs. Panic is more nearly like the unreasoning fear that maddens the mind of a mob at some grave period of physical excitement. There may be a great crisis in the military affairs of an army. A defeat of importance may be experienced and yet if officers and men keep their heads, tend to business and manage well, an orderly retreat may be made to a new position. It may even be possible to turn defeat into a victory. But let fear and disorder stalk into the ranks and the retreat becomes a rout without much chance of any re-formation and only one end,—surrender. And so before we have panic in business the people as a whole, by class and mass, must be fearful. The scare is what reduces a crisis to a panic. As long as we hold control of ourselves, as a whole, and give financial leaders, both bank and commercial, a chance to plan retreat or reorganization there can be no general route. Financial deaths there will be, but reorganization will be possible and surrender prevented.

Crisis is often present and may be turned to panic. Panic reduces efficiency, demoralizes organization, deadens or kills consuming power and paralyzes business. Like a pool with no outlet, business grows stagnant and the scum of depression covers it. This is the high-tide time of pessimists who bark damnation bow-wows from the housetops. There is no business, hence *ipso facto* there will be no business. This is the time for

the credit man to study up on the definition of hope. The bear on business in this country goes shirtless most of the time and the vitality of commercial life will, after some rest perhaps, reassert itself. It is like the hibernation period of the grizzly. The winter may be long but in the spring he comes out, gaunt and thin but virile, purged of fatty tissue, full of life. Depressions digest quite finely all undigested over-optimism, undue expansion and economic waste. The years, perhaps, of compulsory economy bring a better public out than ever went in. And so the wise credit man builds up his knowledge during slow times so as to be fit when business again becomes active.

THE CREDIT MAN—HIS JOBS

A credit man has not one but two jobs. Of course he tries to prevent undue, and only undue, losses. Too great a reduction of losses is not credit sagacity. It is individual fear. A normal loss could be established for nearly any line of business and a close approximation of the normal is the goal. To be too far below the normal very likely marks the refusal of much good business and its trade profit. Too little loss may be an expense instead of a profit.

While maintaining his normal loss and not exceeding it is one job, the other and perhaps bigger job is maintaining the soundness of general business and being a developer of business. Too many credit men turn down loans or accounts, through fear of loss and fear of having to do a little cooperative thinking, that, by straightening out the business processes of the risk, could make a good customer. To be an educator and developer of business is a worth-while job for any man.

CHAPTER II

Sources of Credit Information

The possession of accurate and complete information concerning the various essential factors of a credit risk would almost eliminate credit loss or would reduce it to such a negligible fraction that its percentage would closely approximate zero. But unfortunately the information at hand is often incomplete and is rarely comprehensive enough to cover all the factors in their perhaps remote bearing on the risk.

A credit man of national reputation has likened credit investigation to the rings that surround a stone thrown into a pond of clear, calm water. The place where the stone hits the surface is the focus of the disturbance, or the credit problem. Surrounding this point are concentric rings of disturbance representing the elements affecting the credit risk. The farther ones of these are remotely connected with the central disturbance. It is plainly evident to even the tyro that his investigations must extend to at least the first ring. The more astute students of credit see the advantage of extending their investigations to the second, third or even fourth rings. It is, however, only the real credit man, of real experience and perception, that passes beyond the fourth ring to the fifth, sixth or seventh looking for any ripple on the surface of the pond that might in any way have connection with the central disturbance.

The whole point back of this description is to emphasize the importance of the credit man extending his examination to the

uttermost end of his ability, overlooking no fact that might have a bearing on the matter in hand. A complete and accurate file is the aim of the conscientious credit man. A semi-complete file, not having all the essential facts, incorrect information taken for fact, leads a credit man to pass judgment without the basic information. Too many men, as the saying goes, know things that are not so and do not prove up on them. It is this condition that leads to mistakes that result in losses.

But a mass of information not properly classified as to its sources and weighted in accordance with such sources and their reliability is also misleading at times. Quantity can never take the place of quality. For this reason the sources from which information may be secured are of importance for two reasons. The first of these is omission. We must be sure that, as credit men, we have kept open all the avenues of information and that we use them often enough to keep the grass from growing up between their cobblestones and obliterating them. The second matter of importance is to distinguish the place from which the information comes so as not to mistake for an open highway what in reality is a blind alley or a path with a pit in it.

THE SUBJECT HIMSELF

The most obvious source of information on a credit risk is the subject himself. Either by interview or correspondence the subject can be brought to give information concerning himself. The first bit of information readily obtainable is a list of trade references from which the subject has been in the habit of purchasing goods. If these references are taken at one hundred per cent. they are liable to be misleading and build up a false record for prompt pay, because none but a fool would give as reference any name with whom he had been slow. Such a list might be

almost sure to produce a record of prompt pay and even discounting. Incidentally it might be well to note that this method of maintaining a record for prompt pay and discounting with a selected list, for reference use, is one of the bag of tricks of many a crook who is otherwise milking the trade with orders for which he never hopes or expects to pay. It is well, however, to secure and use such a list as a matter of completeness.

TRADE CHECKING LISTS

A trade list for checking could be compiled by developing some cooperation with the sales department. The traveling man making the store can, if his observation be somewhat trained and stimulated, make notation in many instances, from trade-marks visible on the shelves, of the houses selling the risk. The traveling man and the sales department also know pretty well, from the force of competition, what other houses are selling the subject and by either method can build up a trade checking list.

Another bit of information that is highly possible of close development is to compile an accurate memorandum file indicating the banks of deposit of the risk. In many instances very close information can be gained from the banker in spite of the fact that the bank, as a source of information, is not highly thought of by many commercial credit men. In not a few instances the bank credit man often has a most complete list of trade relations on his risks, compiled from a steady and systematic examination of canceled vouchers, that gives him a sure reference to any commercial house with whom his customer has transacted any business. In many instances he has trade-checked the risk closely, from such a list, and is in a position to give authoritative information as to payment record to any one who is in the proper position and who has a proper right to receive such information.

In another way the commercial credit man can compile a list of bank references that may be used to advantage. Whenever an inquiry is made by a bank the commercial man can be reasonably assured that such inquiry is being made for the serious purpose of building up a complete file. A record of these inquiries, especially if answered with a reply giving the bank some real information, gives a source for checking that is very much worth while.

BANK INFORMATION

The relation between commercial and bank credit men, in the direct interchange of information, is not clearly defined, and being misunderstood by too many commercial men is not properly handled by them. This improper handling is the primary cause of the lack of information given by bank to commercial credit men. The first great misunderstanding is as between cash and charge customers. Many retailers may have good customers, who buy steadily, whose names may not even be known to the credit department because they pay cash. Would the commercial man feel that he was being justly criticized because he could not give close credit information on such risks, that in reality are not risks at all to him? And yet many inquiries come to banks on individuals and even small business houses that are purely depositor customers and not borrowers. Not being borrowers the credit department, having plenty of serious business in connection with borrowers to attend to, has not made up a complete file on the name, having treated the account in a manner very similar to the manner a cash customer is treated by a commercial credit department.

Some years ago the *Bulletin of The National Association of Credit Men* published an article by Mr. William Tonks, of The

First National Bank of Cleveland, now The Union Trust Company, on the acquiring of credit information from a bank by a commercial credit man. As part of this article he published an analysis based on eighty-four inquiries received in one morning's mail. This analysis was as follows:

A. Twenty-four inquiries were on our depositors—ten being borrowers—seven from bankers.

B. Thirty-three inquiries were on depositors in other institutions—fourteen (estimated) are borrowers—nine from bankers.

C. Nineteen were inquiries from bankers on brokers' paper.

D. Eight miscellaneous inquiries relative to stocks, bonds, banks, etc.

This article pertains to the first two groups, A and B, and we shall further analyze these fifty-seven letters:

Thirty-eight were form letters.

Twelve gave street address of subject of inquiry.

Nine gave nature of business of subject of inquiry.

Five gave amount of order or reason the inquiry was being made.

Three did not enclose a stamped return envelope.

Twenty-one said they would treat information confidentially.

Nine were from trade agencies which sell the information to their clients and do not offer to reciprocate except at a price.

We ascertained that at least eight made the same inquiries of other banks in this city, but did not mention the fact. They call this sending out "feelers."

Two gave credit information of value to the banker, one stating his ledger experience and the other gave important figures as well as trade opinions; therefore, two out of the total had the essentials in their letters of inquiry and no doubt are usually favored with like confidence by banks. One letter was from one of the largest textile houses in the country and the other from a prominent steel company.

A large part of the unproductivity of inquiries from bank inquiries can be eliminated by a careful study of this one particular condition used as a rather typical example. Let us take

up, then, in categorical order, the analysis Mr. Tonks elaborates for groups A and B of his experience.

"THIRTY-EIGHT WERE FORM LETTERS"

In all there were fifty-seven letters. This indicates that nineteen commercial credit men, one-third of the whole, were interested enough actually to write a letter of inquiry, probably bearing a signature. Two-thirds used form letters probably without signature. In a mass of inquiry it is perhaps debatable as to whether a form letter may not be used. But if it is to be used by all means use a form letter *that is a letter* with a space for a signature by some one of responsibility so that the person replying may have at least the safeguard of knowing that some one other than an irresponsible clerk is making the request for information. If the commercial man is himself not vitally enough interested to take some trouble in trying to protect himself, by what right can he expect the bank or other commercial credit man to give special attention to the matter.

"TWELVE GAVE STREET ADDRESS OF SUBJECT OF INQUIRY"

The writer himself was once asked for information on Mr. John Schmitt. The city directory listed some thirty-five men of this name. The lack of address or other distinguishing indication left him the option of giving no information or of compiling thirty-five replies. The inference is too obvious for discussion.

"NINE GAVE NATURE OF BUSINESS OF INQUIRY"

If the inquirer mentioned above had given even the nature of John Schmitt's business the puzzle would have been reduced in its complexity although there were quite a number of John Schmitts in duplicate industries.

In connection with these two comments the practise of certain clever crooks who simulate well-known names and establish approximate addresses must not be overlooked. It is only good practise to make sure, by giving street address exactly and the full and accurate name, that you are inquiring on a definite person or house.

"FIVE GAVE AMOUNT OF ORDER OR REASON THE INQUIRY WAS BEING MADE"

Five of the fifty-seven gave the banker some reciprocal information and were therefore entitled to reasonable information in return.

Five gave the banker a direct question to answer. They stated what they wanted to know. Without this information the bank man has no means of knowing whether the inquiry is to cover ten, twenty, a hundred, a thousand or ten thousand dollars of credit. There are plenty of risks worthy of credit for a small amount, that could not reasonably carry a large amount. In order to get a definite answer it is well to consider the desirability of giving a definite question *to* answer. Do not be afraid to ask if the subject is good for a thirty-day credit for an exact amount. This inquiry will be much more likely to bring out a definite answer.

"THREE DID NOT ENCLOSE A STAMPED RETURN ENVELOPE"

If any one wants information the only courteous thing to do is to be sure to enclose the return envelope. Some men make a practise of filing inquiries without return postage in the wastepaper basket. Many such inquiries are answered but they are always an irritation that does not tend to produce a feeling of desire to cooperate.

"TWENTY-ONE SAID THEY WOULD TREAT THE INFORMATION CONFIDENTIALLY"

A considerable number of bank men, members of The Robert Morris Associates, have adopted as the first canon of credit information interchange the following resolution:

> Resolved: The first and cardinal principle of credit investigation is the sacredness of the replies and any violation of this principle places the violator beyond the pale of consideration of the honest credit man.

The fact that it is still necessary for any credit man to promise to hold information given as confidential is a sad commentary on the practise of fairness in business dealing. The statement is to some reassuring and can do no harm. The writer would like to see the above resolution an actuality in practise, and an individual close adherence to its principle by every credit man will, in the end, make for closer cooperation.

"EIGHT MADE THE SAME INQUIRIES TO OTHER BANKS— BUT DID NOT MENTION THE FACT"

It is an annoying thing to a bank man to give his time and attention, the time and energy of an investigator as well in many instances, to answering an inquiry fully and then begin to receive telephone calls from a large number of other banks about a subject. If the commercial credit man wants only the experience in file he can establish a spirit of appreciation, which is the beginning of cooperation, by saying so in some conspicuous place on his inquiry. If he has a right and wishes the bank to make an investigation and states he is relying on that one bank he will get a better cooperation. But in this the inquirer must be exactly accurate because if he is not the honesty of his intentions will be

questioned and his avenues of information will be closed very quickly if he makes many mistakes or misleading statements.

"REPORTING AGENCIES"

Another source of credit information, and one that is of course well recognized, is the mercantile agency. Of the general mercantile agencies there are two of well-recognized standard. There are in addition to the general mercantile agencies a considerable number of special agencies dealing with a specific line of trade and arguing that because of their specialization they can render more important information concerning risks in that particular line.

While there is some doubt of the extent of the reliance that can be placed on any book ratings in time of commercial crisis, by the writer at least, still the books serve a very good purpose for quick reference to determine whether or not a new customer has at any time in the past achieved any recognized standing. Used as an index to trades and existence of independent units they are of a very positive value. They should not, however, serve as an infallible guide as in quickly changing conditions they can become obsolete very rapidly and in proportion to their obsolescence they can be dangerous, if used alone. When there is any question of a doubt the special report should be called for as this can more readily be kept up to date by the agencies and can indicate sudden reverses in the affairs of the risks under examination.

In any order of considerable size, especially if a first order and unknown personally or if an unsolicited order, the credit man should not hesitate at the expense but should request the local manager of such agency as he uses to secure a check-up by night message from the branch located at the point where the risk is

domiciled. In such telegraphic inquiry the importance of giving the exact name, type of business and particularly an exact address, including street and street number, with a request to be sure the reply checks up on these points as well as on the generalities of the risk, is a most important matter. This may often be the means of disclosing the crook operating under a similar name in an approximate location, which gentry have caused a good many heartaches to credit men.

Statements appearing in agency reports are a good check on statements received direct and in a good many instances have disclosed discrepancies that have been most interesting.

There is another value to the agency report that is included in the body of the report and consists of the antecedent information which the agency is able to secure on a new risk. In a good many instances it has been possible for a credit man to save himself embarrassment and loss because of some antecedent information concerning the personnel of the management of a risk under contemplation. These reports therefore should be read carefully, particularly as they indicate the past successes or failures of industries under the same management or partly under the same management.

Actual experience will indicate that the special reports in many instances will not be revised within six-month periods and that they are often a year old. One of the pet methods of several agencies is to stamp on the bottom of a special report of an old date the phrase "will get later." This is supposed to mean that the agency itself recognizes that the information in the report is of such long standing as to be more or less subject to suspicion as to its accuracy and they voluntarily suggest the advisability of securing later information which they promise to send later. Unfortunately it too often happens that a credit man might read

this report and might not take proper cognizance of the "will get later" clause and miss the later information in the reading of it, in the feeling sure that his department has received it or in passing on the risk before receiving it. In order that there can be no mistake and so that this condition will not be overlooked it is probably advisable to establish some definite method of calling for agency reports.

The agencies all issue inquiry tickets upon which their subscribers may make inquiry concerning any risk in which they are interested. The normal practise is to have the inquiry ticket filled out and forwarded to the agency in question. Too often when a memorandum of a proper nature is not kept in the credit department, as to the inquiries outstanding, the date upon which the inquiry has been sent out and the result becomes uncertain. It is a comparatively simple matter to have the inquiry tickets padded with duplicate interleaves of plain white paper or in some instances to use a special inquiry slip with the name of the subscriber plainly printed thereon. If with the interleaving method the credit department will make it a practise of taking a carbon copy of the inquiry and filing this alphabetically in a proper place it will be possible for the credit man, and he should establish it as a practise, to check up very easily his outstanding agency report requests periodically. This should be done at least once and preferably twice a week. If a report is received marked "will get later" a notation should be made on the request slip thereof, with the date of the receipt of the "will get later" notice and this duplicate ticket should be kept in the alphabetical file of outstanding, uncompleted reports. This practise will make it almost impossible for the credit man to allow requests for reports, from a commercial agency, to become stale and it will also prevent him from taking a "will get later" report and being satisfied there-

with. The marking on the duplicate memorandum ticket, in the alphabetical holding file, should be made by some one clerk whose duty it will be to glance through the report noting the date thereon and any "will get later" notice, making the memorandum on the duplicate slip of report requests that are more than six months old and leaving this memorandum in file for the judgment of the credit man as to whether or not the information on the report is sufficiently fresh.

Occasionally a request for information goes to a mercantile agency and apparently goes to sleep. The author has found it effective to have a printed slip headed by the name of the sub-

COMMERCIAL INQUIRY

DELINQUENT TICKET

On................................we called for report on

....

This has not yet been received by us and we would ask when a report on this name may be expected.

The
First National Bank
of Philadelphia

scriber with a space to address it to the local manager of any of the agencies calling his attention specifically to the fact that on a certain definite date an inquiry was sent to his office for information on a certain risk and that this information had not been received and it is considered a delinquent report on the part of

the subscriber. This follow-up ticket should preferably be made of a paper of distinguishably noticeable color so that it would be prominent among papers on any desk. Personally the author used a bright yellow sheet. This delinquent ticket should not be sent through the mail or otherwise to the agency, as such, but should be mailed to the manager of the agency and the envelope should be marked "strictly personal." The writer has found that a delinquent ticket sent to the manager of the agency produces results. The local manager of an agency, if he be the right kind of man, should welcome this as a regular order of business. He as much as any one should be very interested in supplying prompt service but can not possibly supervise personally every inquiry. If his office is falling down he should be glad to have his attention called to the fact. If he can not or does not appreciate this as true cooperation then he should be visited and have it explained to him forcibly as part of the selling scheme of his service.

THE PRESS

Nothing of importance can happen to-day without the press of the country getting wind of it and transcribing the main facts to its various sheets.

Beginning with the daily papers, in their vast general information, and passing through the general weekly and monthly publication until we come to the highly specialized trade and technical magazines, we find at all stages information most interesting to the credit man who studies the game in its finer points. Not only is there much of specific interest but also is there a great amount of general interest. Some trade journals make specific studies of conditions in the various lines they are associated with and compile records of volumes of business, conditions of collections, etc. The statistical information that can be gathered

from reading the press is very great. This information interpreted will give the credit man a balance or poise in his credit granting that is profoundly worth while. A small amount of time spent in analyzing the news is well worth while. A scrapbook, divided into subjects, can be made to produce a bird's-eye view of conditions that is worth all the time it takes to prepare.

"When every one thinks times are good, times are good," is an old saying. This is only a commonplace way of saying that the crowd mind correctly reflects the true condition of the economic state of affairs. If one would read the papers only to get the state of mind of the people and to watch the ebb and flow of the tides in the crowd mind the reading would often forewarn him of approaching strains in the credit fabric. The analysis of any risk is based on about forty per cent. static, forty per cent. dynamic and twenty per cent. economic conditions. This means that forty per cent. is based on actual physical strength of the risk, assets and liabilities, forty per cent. on the moral risk or ability and willingness to fabricate at a profit and settle as agreed. and twenty per cent. on the condition of the country as a whole, outside of the individual risk itself. This condition of the country, improvements in production methods, condition of crops forecasting purchasing power, etc., are the things on which the credit man ought to keep posted and on which he can keep in touch by reading.

ACQUAINTANCE

Centuries ago there was a strong and prosperous nation. In many of the sciences this nation led the world and much of our present-day mathematics was known to these people. Astronomy may almost be said to have had its birth in this nation. Gunpowder was their invention. And after reaching its zenith, China built a wall around itself and started to ingrow. To-day,

with vast natural resources, with every fifth or sixth person in the world a Chinaman, the country is ineffective. The Chinese wall, both physical and temperamental, shutting out national acquaintance, stultified advancement. If, as a nation, China had maintained contact with the world at large she would not have gone to sleep.

An individual credit mind of the very highest standard can accomplish entirely by itself a considerable amount of satisfactory credit work. If, however, this mind has the advantage of contact with other minds of a similar kind its effectiveness will be greatly improved. It is therefore most important for the credit man to remember that he can not confine his credit activities to eight working hours within the four walls of his office. Acquaintance and the broadening effect, as well as the increased sources of information produced by it, is a thing that can not be overlooked because of its very great importance. There are innumerable instances of credit men assisting one another because of their acquaintance.

The matter of acquaintance suggests to the writer, in the improvement of the mental faculties, a stand often taken by the hard-shelled business man who has succeeded because of his inherent ability although lacking education. Take two men of identical mental equipment and give one a thorough educational economic training and there can be no question but that the man with the training and the economical background will be the more successful in business. Take two men with the same identical mental equipment except that one has the faculty of establishing acquaintances and friendships and the other has not and the man who can establish the friendships will win out.

No credit man can afford to surround himself with a wall, shutting out contact with the vast army of credit men active every

day in the affairs of the country. Some there are whose intellect and ability stand out like beacon-lights in this field. But even they can gain by rubbing elbows with the lesser lights. There is little likelihood of a stranger giving inside information to any one. But acquaintance removes suspicion, engenders confidence and in the end establishes cooperation. And cooperation and interchange of information both on theory, practise and fact is probably one of the best sources of information that can be made available to any department. In saying department just that is meant because department acquaintance is what is most needed.

THE NATIONAL ASSOCIATION OF CREDIT MEN

In the practise of credit granting there is an exceptional opportunity for the development of personal and department acquaintance. This is through the activities of The National Association of Credit Men. There is a great body of credit men and women gathered in this organization. Those of its members who take its opportunities seriously in a personal manner have in cases innumerable established a breadth of personal acquaintance that is immeasurably valuable to them. Observation, during many years of active attendance at meetings of this organization, however, has lead the writer to believe that the benefits are not so widely extended as they could be. There seems almost always to be a tendency for acquaintances to group themselves together. If these acquaintances be real then continued grouping together does not materially enlarge the total acquaintance. Better by far would be the practise of sitting at the table at random, among strangers if possible, to find new acquaintances worthy of being developed into friends.

Department acquaintance has been mentioned and it is primarily in the gatherings of The National Association of Credit

Men that this department acquaintance can be developed. The mere maintenance of a membership by the head of a credit department is no open sesame to acquaintance unless he attend the meetings and exercise his personality. There are times when the head of a department may not be able to attend such meetings and here is the first opportunity to develop department acquaintance. When he can not go himself let him send his assistant, his head bookkeeper or his younger man, whom he is trying to develop to take his place. This substitute will always meet a ready welcome and by getting some smaller personal acquaintance will give another contact point between the department and the credit fraternity that will open up supplementary channels of information and develop department acquaintance. Then let the chief at times accompany his junior and give some attention to introducing him so that he may have better access to the cooperation benefits of the other departments. If any house maintained several memberships and paid all the costs of attendance at such meetings the money paid would yield a net return in department acquaintance, sources of information, etc., that would far exceed in value the trivial expense connected therewith.

THE INTERCHANGE BUREAUS

The Interchange Bureaus of The National Association of Credit Men are a source of information that might have been discussed under mercantile agencies. They are agencies, but, being mutual in their composition, the writer has considered it more effective to handle their operation after discussing the benefits of membership in The National Association of Credit Men and in a place by itself. To secure the most authentic information possible he has secured a description of this work by the manager of the Central Credit Interchange Bureau of The National Association

of Credit Men. It is published herewith as written and needs small comment as it covers authoritatively the question in hand.

DEVELOPING INTERCHANGE OF LEDGER EXPERIENCE

Plans of National Association of Credit Men, in Credit Interchange Department. Furnish an Interesting Example of How Manufacturers, Wholesalers and Banking Institutions Are Supplied with a Definite Credit Protection

By E. B. Moran, Manager
CENTRAL CREDIT INTERCHANGE BUREAU
SAINT LOUIS, MISSOURI

During the recent years, many wholesaling, manufacturing and banking houses have come to feel that despite the excellence of the service usually rendered by the large mercantile agencies with their extensive organizations and with the ramifications of their investigating system there is a certain element lacking, namely, a convenient manner for creditors selling the same accounts to interchange ledger experiences.

Recognizing this need, the National Association of Credit Men has set forth a medium through the Credit Interchange Bureau Department to provide an impartial means between creditors to establish a system whereby members who are interested in any account may freely and unreservedly interchange the facts contained in their ledgers, without the necessity of direct reference, each to the other; also without divulging this information under their own name; and at all times receiving in return for each experience or comment contributed by them, the combined experiences of all others interested in the same account under investigation.

The credit information assembled by these bureaus differs materially from the nature of data that is supplied by the mercantile agencies, for the interchange of ledger and other credit experiences does not directly concern itself with record of antecedents. financial statements, nor the dealers' character and reputation. Such an interchange system takes into consideration solely the subject's recent purchases and the manner of payment of same.

Experienced credit managers are agreed that this form of information constitutes the most valuable basis of credit extension at present available, for it is recognized that the record of the

subject's purchases and payments, provided it is sufficiently complete, affords more material for intelligent credit analysis than the combined record of antecedents, financial rating and a reporter's opinion.

With about fifty such offices, or bureaus, as they are known, in the principal markets of the country, the Credit Men's Association, coordinated in their manner of operation, the credit grantors have a source of investigation that assures an adequate and uninterrupted national intermarket clearance of credit experiences, and with a Central Credit Interchange Bureau operated at Saint Louis, Missouri, such investigations are handled with the necessary despatch required by the Credit Department desiring to pass on the account or order.

METHODS OF OPERATION

The first step is in each subscribing member of an Interchange Bureau filing a complete list of active customers. A card is then made out in the office for each of these customers and is filed alphabetically. Upon each of these cards are entered the numbers of those houses that are shown to be selling the dealer whose name the card bears. Accordingly when an inquiry is received, as the clerk refers to the file, and to the inquired upon dealers' card, he can tell at a glance what members are interested in that particular customer. He knows, therefore, where information about that dealer may be had, and he also knows what members among local market will be interested in learning of any change, favorable or unfavorable, that may occur in that dealer's condition.

This method insures the elimination of the so-called inquiry sheet or clearance sheet which is not regarded the scientific method of assembling information and which has been used in the past, for, instead of preparing a list of all inquiries received and sending to each member to be checked, this improved manner of operation enables the bureau to prepare a form similar to the formerly used subscribers' reply ticket, filling in the name and address of the inquired upon subject, so that a cooperating member receives a ticket of inquiry only when the bureau records show his interest in the account and that member has then, only to insert his experiences and return same to the bureau as promptly as possible, thereby enabling the local markets to be thoroughly cleared in a limited number of hours rather than in several days. The furnishing of a list of customers is a necessary condition of

participation in the bureau, under the new plan of nation-wide operation.

At the same time the local clearances are started, each office clears direct, all other participating bureaus that are in the Natural Zone of direct purchasing interest of the inquired upon subject, or, in other words, that territory in which the majority of dealers concentrate the preponderance of their purchases, following an office chart, which has defined these zones of interest. In this manner, it makes each office, to a partial degree, a central clearance office.

A further inquiry is referred to the Central Credit Interchange Bureau, operated at Saint Louis, which has record of all bureaus interested in each account that would not be termed in the natural direct zone of concentrated interest or purchasing, of the inquired upon subject and the Central Bureau, upon receipt of this inquiry, immediately notify the interested offices of this pending inquiry and they in turn, following the previously described local method of clearing, obtain what information is available in their district and forward the information resulting from investigation, direct to the original inquiring association office.

In this manner, the Central Bureau is not a bureau for tabulating reports, but rather carries records of the markets that are interested in various inquired upon parties and the information being sent direct to the office from which the inquiring house is a member, materially reduces lost time and effort in completing a clearance and enables the department to supply inquiring members with completed investigation of each market in a limited number of hours, plus the time of mailing to and from the markets to be cleared.

The peculiar value of this source of information gathered and disseminated through the Credit Men's Association Bureaus, lies chiefly in the fact that such information is not based upon anybody's opinion, as for example, that of an agency reporter, nor does it have any reference to what the subject may say about himself—either or both of which may be at variance with existing conditions. On the contrary, such a report is a concise and uncolored record of actual transactions, being made up wholly from the information furnished by members as a result of actual experiences at the time inquiries are made.

GETTING A STATEMENT

The following letters have been used in securing information from a new or an old customer and are well worth considering as productive in securing accurate and important information. They among other things suggest the securing of a statement from the debtor. The statement is a most important source of information and its treatment will be fully considered at another place in this discussion. There are also some checking letters.

Asking a statement from a new account

Dear Sir:-

Received with pleasure the order you were kind enough to give us as an evidence of your interest in our productions.

We have not thus far had the privilege of serving you, and are therefore without the necessary trade information concerning your good firm, and we are sure you would wish us to have details at your hands in preference to receiving them unauthorized from other sources.

We, therefore, submit for your convenience a customary blank which we ask you kindly to fill out for us with figures from your most recent inventory, and return to us at an early convenient date.

May we count upon your prompt response?

Truly yours,

A second request for information from a customer

Dear Sir:-

We are at a loss to know just why it is that we do not receive a reply to our several letters, regarding a statement of your affairs. We are not actuated by anything but a sincere interest in your welfare and a desire to be of service to you.

We trust, therefore, that you will let us have this information without delay.

Yours very truly,

When a customer refuses information, references and statement or ignores such requests

Dear Sir:-

As we have written to you several times, asking you for the courtesy of a statement of your affairs, in as much as we have had no previous dealings, and since we have had no reply to these several communications, we can only assume that you are not interested in the subject.

We shall therefore drop the matter, and cancel the order.

Yours very truly,

Asking references and statement from a non-rated prospective customer

Dear Sir:-

We are very appreciative of your inquiry and hope that it shall be our privilege to serve you.

Yours being a newly organized institution—your name does not appear in the reference books of the Mercantile Agencies—we would therefore be pleased to have you supply us with information regarding yourselves, together with the names of firms in our and kindred lines from whom you have been buying.

Possibly you are in a position to furnish us with a statement of your affairs, that we may more quickly reach an understanding; in which event you will find enclosed a form convenient for that purpose.

We hope to hear from you promptly.

Yours very truly,

Request for statement from an old customer who asks for more credit

Dear Sir:-

Your order recently placed with us through Mr. ——— was appreciated as evidence of your continued interest and confidence in our merchandise. It shall be executed with the utmost promptness, and since we are in a better position this year to serve our customers than ever before, we hope that we may offer you the advantages of these improved facilities.

Incidentally we notice that we have never received from you a statement of your affairs, and since we assume that in common with most other merchants, you have either recently completed your annual stock-taking, it will probably occasion you no inconvenience to supply us with this information now.

For this purpose, we enclose a blank which you may fill in with your latest figures when you have them accumulated, and return to us. This courtesy on your part will be appreciated.

With best wishes for a most successful season, we remain

Yours very truly,

When references are given but no statement

Dear Sir:-

Your letter is indeed a satisfactory response to our inquiry, quite satisfactory in the main. The references you name are high grade and reflect favorably upon your institution, in that they show the standing of houses with which you do business.

We shall advise our salesmen to that effect, but in the meantime we should like to have you give us some further details concerning the financial composition of your firm, for which purpose we enclose a blank. Will you kindly fill this in with figures from your latest inventory and return to us when completed.

Be assured that our inquiries are only promoted by the usual business prudence, a prudence that has your interest as much at heart as our own.

Yours very truly,

(Encl)

Used to acknowledge a statement

Dear Sir:-

We thank you very much for the financial statement you have sent to us, and are pleased to observe the very excellent condition it discloses.

Your order has already been put into work, and will be hurried along to completion, and we hope to get your merchandise to you in ample time for your requirements.

We shall look forward as a result of this initial contact to larger and more extensive dealings in the future, and with best wishes for a most successful season we remain,

Yours very truly,

Checking a reference given

Dear Sir:-

An order for about $...... from......................
is accompanied by the information that they also buy of you.

Being our first transaction, we are without adequate knowledge of this concern and would appreciate it if you will give us

the benefit of your experience, together with such details regarding capital, character, etc., as you can consistently disclose.

We enclose self-addressed envelope for your reply and assure you of our readiness to reciprocate at any opportune time.

Yours very truly,

Trade checking through reference given by a customer

Dear Sir:-

We are revising our files concerning ....
who we believe is also a customer of yours.

We give you below a synopsis of our experience and will appreciate it if you will reciprocate in kind.

Our inquiry at this time is prompted entirely by the desire to bring our information up to date, and should we learn anything of interest we shall communicate it to you.

Yours very truly,

To attorney where necessary to get information

Dear Sir:-

Kindly favor us with information relative to ....
from a credit standpoint involving possible transactions of $....
in the course of the next three months.

Please state from your own knowledge and observation what is the standing of the firm in your community, morally, socially and financially; whether their business presents an air of progress and prosperity; what kind of clientele they cater to; whether they are doing the leading business in their line in your city; if the members of the firm are men of integrity who are known to stand back of any agreement and contract they enter into, if they are strictly attentive to their business or have outside ventures; if their habits are extravagant or otherwise; what, if anything you may know or can ascertain regarding their means and their liabilities, and anything else that may have bearing on this firm from a credit standpoint.

We take your name from ....
who speak very highly of you, and shall hope to receive from you the same conscientious service that we receive, as a rule, from representatives of that list. We enclose fifty cents in stamps in a preliminary way to cover cost of report and anticipate your early reply.

Yours very truly,

CHAPTER III

A Word on Collections

The condition of the payment record of customers in toto is a very important indicator for the credit man. Strains in the credit fabric indicating approaching critical conditions in the affairs of an individual company, a section of the country or the country as a whole, are, as a general thing, preceded by a slowing down in the activity of the credit of the country or of the individual concern. It is an endless circle of inability to make prompt payment because prompt payment has not been made by debtors the next step removed. As each or any stage of manufacture clogs up and becomes slow pay so it becomes increasingly difficult for the next stage to pay until the buck has been passed around the circle and we have a general stagnation.

The condition of collections then is a very interesting barometer of general conditions and a close and accurate analysis of collections is highly important to the credit man. But how shall we measure the collection condition? The amount of outstanding or even past due accounts is by no means an indicator by its bulk alone. Too many men are made unduly pessimistic because on any certain date their past due accounts are greater than on a corresponding date the previous years. There is a variable that must be taken into consideration each time and too often the consideration of this variable is omitted.

Because the past due accounts this year amount to fifteen thousand dollars whereas they amounted to only ten thousand last year we are not necessarily to decide that collections are

worse. If we are confronted with this condition, let us say at the end of the fiscal year, we must compare the remaining past due items with what caused their possible existence. If the sales for the preceding year were one hundred thousand dollars and the past due on January first ten thousand we have a percentage of slowness of ten per cent. Then this year if we are to have past due accounts of fifteen thousand dollars and the same percentage of slowness we should expect to have accumulated this amount of slow accounts from one hundred and fifty thousand of sales for the year.

Mathematically speaking and reducing this type of analysis to a formula we would get the following:

$$\text{Degree of Slowness} = \frac{\text{Past Due}}{\text{Year's Sales}}$$

In the first case with sales of one hundred thousand dollars and ten thousand past due accounts and substituting these figures in the formula we would have:

$$\text{Degree of Slowness} = \frac{10{,}000}{100{,}000} = 10\%$$

If in our second year in which we have past due accounts of fifteen thousand dollars and if we should find our sales had been two hundred thousand dollars we would have a chance to compare the "Degree of Slowness" by writing into the formula these second figures. This would result as follows:

$$\text{Degree of Slowness} = \frac{15{,}000}{200{,}000} = 7.5\%$$

This will indicate not a worse "Degree of Slowness" but an improvement of two and one-half points or twenty-five per cent. In other words to have the resultant percentage from the table

equal ten per cent., the amount of past due accounts would have to have been twenty thousand dollars. In other words the sales having doubled the past due should have doubled but it has only increased one-half or fifty per cent., and in its formula the percentage has fallen twenty-five per cent. or one-quarter.

This method will establish a way of comparing actual "degrees of slowness." But it can, in practise, be developed beyond this point by establishing a "Degree of Liquidity." (A discussion of this will also be found under the chapter on Internal Statement Analysis.)

For this we can also develop a mathematical formula, that will make possible the comparison of liquidity from year to year. This formula should be written:

$$\text{Degree of liquidity} = \frac{\text{Year's Sales}}{\text{Outstanding Receivables}}$$

If a company is selling on sixty days' time and, for argument's sake, its customers are all paying on exactly this schedule then we should have for every one hundred dollars in receivables on an average, six hundred dollars in sales, because sixty days is one-sixth of the commercial year, roughly speaking. In this supposition the formula, with this amount entered would read:

$$\text{Degree of liquidity} = \frac{600}{100} = 600\%$$

If as a matter of fact the outstandings were one hundred and fifty dollars and the sales six hundred dollars the formula would indicate as follows:

$$\text{Degree of liquidity} = \frac{600}{150} = 400\%$$

This would mean that, in place of selling on the supposed

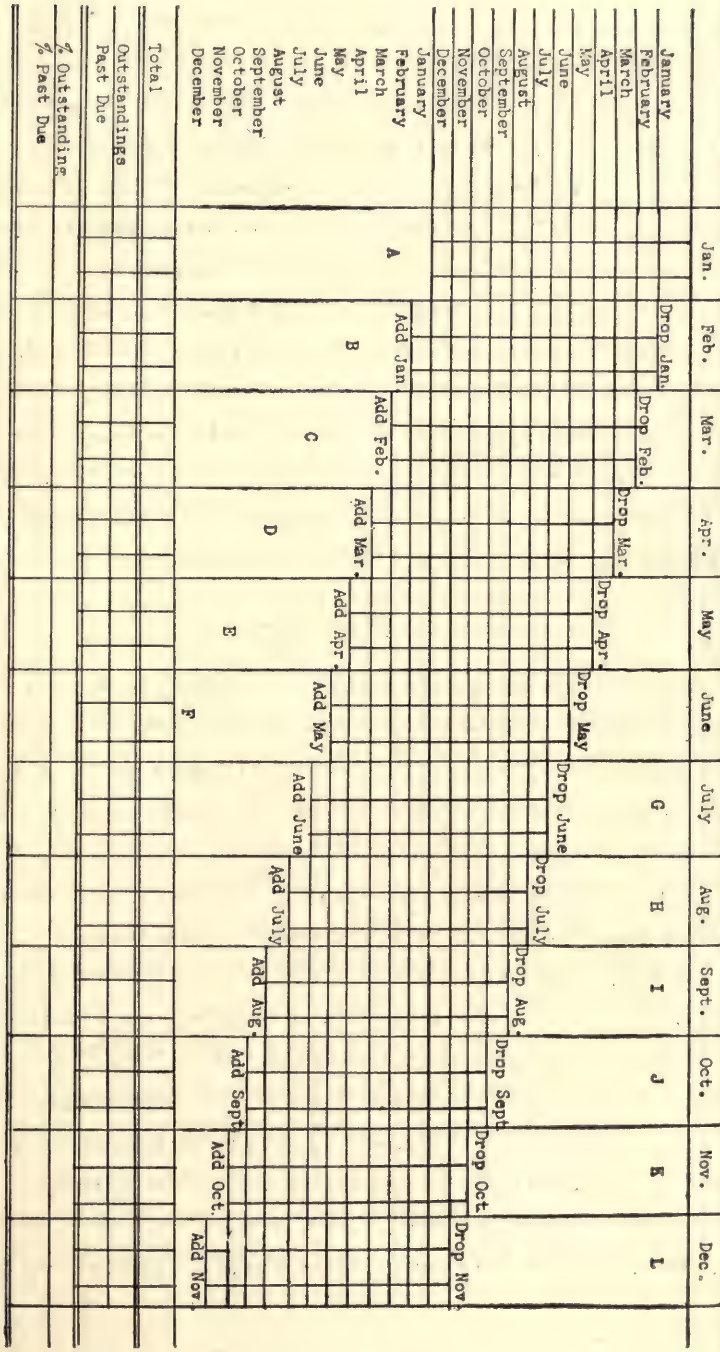
sixty days' time, the actual days to collect were one-half more (the proportion of the difference two hundred, as compared with the actual liquidity ratio four hundred per cent.) or that the real collection period or practical term of sales ran to ninety days. The four hundred per cent. means that the sales produce the receivables four times a year or that the outstandings equal one-fourth of a year's sales. Then by analogy the time in days to handle them is one-fourth of a year, three hundred sixty days, or a ninety-day period. This is of course on average and normal figures and is valuable for comparison mainly when taken under similar circumstances.

The relation between the percentages resultant from the use of these formulas will make evident not the bulk condition but the relative condition, after making allowance for the variable item of sales in its relation to the past due or the outstandings as the case may be. It reduces any tendency to become alarmed by a mere increase in bulk if accompanied by an offsetting increase in volume of business. It also removes the danger of a false feeling of satisfaction and self-complacency in a decreasing bulk of past due or total receivables accompanied by an increased proportional decrease in volume. If the volume of sales decreases faster than the volume of outstandings or slow receivables the indicating ratios will show a falling off in their percentages with even a decreased lump of outstanding slow accounts or total receivables, and vice versa.

A RUNNING ANALYSIS OF LIQUIDITY

So far our discussion has been limited to a once a year analysis, as at statement or inventory time. This kind of analysis, however, is of perhaps limited value because of the length of time between the two analyses. A closer study should be made

Liquidity Chart.



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and a monthly period is suggested. This monthly analysis is valuable because of two things. First it checks oftener and indicates sooner the approach of periods of credit strain. Secondly, over a period of years, it will make possible comparison as between seasons, indicating seasonal variations. This seasonal study is of great value as it checks up on the temperamental side of sales terms. Long datings and seasonal extension of terms will be indicated and yearly stresses in different seasons can be compared. For the better and more systematic handling and accumulation of the necessary data to make this easily done the following chart is suggested as a means of collecting, tabulating and comparing the necessary information so as to analyze the liquidity condition on a monthly basis and indicate seasonal or temperamental fluctuations in the basic proportions.

CHART EXPLANATION

This chart is designed to cover, in monthly periods, a complete year's sales operations. Across the top are twelve divisions for the months of the year. In the left-hand, first or index column, are twenty-four monthly lines covering the calendar months twice. As we progress from month to month across the year, as displayed in the headings, one month is dropped from the top of the active column and one added at the bottom.

In the January column we find the net sales for each month, which, added and carried down to the total line, will indicate the sales for the complete year ending December thirty-first. A red line under December indicates the end of the first year. In the second column we drop January from the first year, at the top, and add January for the second year, at the bottom. A footing of this column will then give us a year's sales up to January thirty-first of the second or current year. In preparing to

use such a chart it is suggested that the monthly sales for the year be entered in the first column and then all the extensions made to complete the chart above the middle red line. As the new months are added they can well be extended across the sheet to complete their part of the second year's record.

Each month a note should be made of the total of the outstandings and the past due accounts on the lines provided for that purpose. To be conservative and for the sake of accuracy any account going past the term of sale should be considered past due no matter how slight the default.

USE OF CHART

With the chart compiled it becomes possible to make some very interesting and instructive comparisons and deductions.

First the amount of both outstandings and past due items should each be reduced to their respective proportions with the sales for the year ending with the month under analysis. This is accomplished by dividing sales total by these respective amounts. This plan is suggested for two reasons rather than the reverse process of dividing the respective amounts by the sales. The first reason is for the sake of uniformity in connection with a process of statement analysis as explained in another chapter. The second is that an increase in the ratio indicates an improvement in liquidity which is a more normal record than having a decreasing ratio indicate an improved condition.

With these ratios, expressed in percentages, entered on their respective lines it becomes possible to compare the "Degree of Liquidity" and the "Degree of Slowness" from month to month and from year to year. By establishing a study of this kind seasonal variations are allowed for, because each monthly study is complete in itself, is based on a full year's business, making it

less variable, and is comparable to the liquidity and slowness studies that may be made at the end of the fiscal year or statement time, and at the same time in preceding years.

It might be possible and would surely be interesting to carry a space on this record to enter the cash sales for the month or the amount of goods sold on which the buyer had taken full benefit of the discount. These amounts could be compared with the year's monthly sales in the same way. An increase in these ratios followed by a decrease in the sales to receivables ratio might well be the first indication of the customer taking time instead of discounting, perhaps to be followed later by taking more than full time. By this method an approaching period of general slow pay might well be seen in its early stages and the warning hung up against possible cancellations and business stagnation.

A percentage of cancellations could also be figured, recorded and compared month by month and year by year.

With such a method in operation the credit man and the executive could measure accurately the condition of collections and state of payment by true comparisons rather than by mere bulk outstanding regardless of volume.

CHAPTER IV

Collection Letters

The author frankly admits that from personal experience he has had little to do with collection letters. These are a feature that enters very little into banking work. For this reason the material for this chapter is developed from sources opened by a fine spirit of cooperation of commercial men who have been through the mill with the delinquent account and thoroughly know the game. But the correspondence and discussions in the preparation of this particular discussion have led to certain reactions, probably reflecting the attitude of the recipient of a collection letter, that may possibly be productive of good thought.

When a credit man, who is a credit man and not just collecting machine, approaches the problem of collecting a delinquent account he should have two prime things in mind. He should be after the money. He should be trying to keep the account. If he should succeed in getting his money and at the same time create an animus that precludes his house doing any further business with the subject the then collection may prove a serious trading loss.

This collecting of accounts from "Mr. Slowbutgood" is more often the treatment of an individual disease than was usually recognized some years ago. Some men need only a sharp reminder, some need a bit of humor in the request, some need threats and some need the offer of cooperation in working out their difficulties. This variation in the causes of delinquency and in the methods of treatment by the plain application of logic

means that the most desirable way of writing a collection letter is to analyze each case independently and prepare a letter for each case with the necessary allowances for the variations of temperament and conditions.

It would be manifestly impossible to prepare a series of form collection letters that would automatically adjust themselves to the variations of character and case so that they could be used universally for any delinquent in any line of trade in any location.

One of the past masters of commercial credit, a man who for many years has been a business builder as well as a collector of a large and prosperous middle western dry-goods house, in answering a request for forms of collection letters used in his routine work wrote as follows:

In answer to your letter of July 14, I enclose a few sheets containing thoughts, which I have found especially good, to be used in preparation of collection letters. Most of them may be familiar to you, as I culled them largely from the bulletins of the National Association of Credit Men and from credit letters that have appealed to me. We do not use regular form letters, but incorporate sentences from the material I am sending, in a sort of standardized letter which we write when we think it is wise or necessary to write at all.

When an account is just past due and not paid, we use either a rubber stamp or a sticker—samples enclosed—which we find very useful. Not until we exhaust these simple methods do we begin to write letters.

The stickers referred to are as follows and are used to attach to invoices:

SEVERAL statements have been sent you. Do not by longer delay force the use of unpleasant methods to collect this bill!

IF inaccurate, or if there is any reason why settlement should not be made, call, or notify—matters may be adjusted.

→Undoubtedly this matter has escaped your attention. Your early reply will be appreciated.

☛Your account once more brought to your attention. It is past due. WHEN can we expect payment?

☛We have been very fair with you, but this account is so long past due that we must NOW insist upon immediate payment.

☛If settlement of this account is not made at once we will be forced to instruct our attorney to collect immediately.

☛You have perhaps allowed this account to escape your notice. Please give it your prompt attention.

IMPORTANT NOTICE!

Unless we receive remittance to cover this account by .... we shall draw on you through our bank.

FINAL NOTICE

Unless we receive remittance to cover this account by ....the same will be placed, with our attorney, for collection.

In addition to the stickers this wise old credit man has several rubber stamps which he uses on second bills:

CHECK FOR ABOVE BY RETURN MAIL WILL BE MUCH APPRECIATED.

This item is small. Please remit promptly. This will save you the annoyance and us the expense of another statement.

As you have not replied to our statement of .... we have this day drawn on you through the bank, and trust you will honor the draft promptly.

While the use of a form letter of collection may not be desirable because it can not be made individual enough it is still interesting to have as examples collection letters that have been used to good effect by credit men in handling their accounts that have been slow. With the idea of suggestion in phrase, style and

method the writer secured a considerable number of collection letters, both individual and in series which are reproduced herewith as suggestive material. A full appreciation of the courtesy and cooperation of the originators is expressed and deeply felt at this time.

The following letter starts on the right track by seeking to get the basic information at the time the account is opened and should perhaps have been inserted in this manuscript under sources of information.

Letter No. 1

Dear Sir:-

We beg leave to thank you for your order received to-day through our Mr. ——————.

As we have not had the pleasure of doing business with you heretofore, and do not find you rated in the *Commercial Agency Reports,* we enclose a statement blank which we hope you will be good enough to fill out as it will give us the information we desire in the most convenient form.

We could, of course, write to your neighbors, but we much prefer to go direct to you, for you know more about your affairs than any one else, and we are certain that you will understand this is no reflection on your credit standing, or in any way questioning it. We trust we may find your statement so satisfactory that we may often be of service to you and when relations are once established they may prove mutually satisfactory and profitable.

We carry the largest and most varied line of any jobber in this territory and we are very confident that we can make it to your interest to do business with us, and when you come to (town) be sure and look us up and we will be glad to show you what we can do.

Hoping to hear from you promptly, we remain,

Yours truly,

The following two letters constitute a short series. The first, the writer states is changed from time to time to conform to seasonable conditions and is sent out without much delay.

Letter No. 2

Dear Sir:-

Your account to-day shows an unpaid balance of $........

Perhaps you had not noticed its maturity but now that you recall it we know you will act promptly.

The summer sunshine will probably show up some low spots in your neckwear stock that you may want to brighten up with a few dozen attractive items. To get them promptly you have only to say how many and what styles when you are enclosing check.

Yours very truly,

The second letter of this series discloses a rather unusual device. It has, however, obtained excellent results. It is a good example of close observation of things not directly in the department and exemplifies the importance of following the doings of the times.

SERIES A.

Letter No. 3

Dear Sir:-

Kindly advise us by return mail your records of invoice of (date) amounting to $............ which still remains open and unpaid on our books.

Under a new ruling of the Interstate Commerce Commission express companies are forbidden to pay for lost shipments unless claims are promptly filed and as the time is approaching when this limitation would bar us from protecting our mutual interests we would be pleased to learn by return mail whether or not you received the package.

If the delivery was made and you could with your reply favor us with a check to cover it would be doubly appreciated.

Yours very truly,

In the following series the credit man is big enough to appreciate the ideas of his co-workers. After the first letter, the letters are changed monthly, giving variety and keeping the series always alive. These second letters utilize the best letters sent in

by a branch manager in a competition among the branch managers. The fourth of this series is the final demand before placing the account in the hands of a collection agency.

SERIES B

Letter No. 4

Dear Sir:-

Did you overlook forwarding a remittance for your account with us of $............, now due, statement of which has been sent you, and *don't you need something in our line?*

Statistics, even government prepared, indicate stocks are diminishing, but we still have a full line from which we would be pleased to serve you, and considering transportation difficulties, it is always well to order in time.

Why not "play safe" and let the order and check come forward together? Thank you!

Very truly yours,

Letter No. 5

Dear Sir:-

We wrote you a short time ago concerning your account of $........, but find you have not remitted. As it may have been overlooked and is past due, your check in settlement would be appreciated.

It will not be necessary to write us a letter, should you find it inconvenient,—although we are always pleased to hear from our customers,—just mail your remittance to us attached to this letter in order that it may be readily identified.

Very truly yours,

Letter No. 6

Dear Sir:-

Our aim is to please both with our products and our policies.

We have adopted terms that are most reasonable—net within thirty days.

We do not wish to appear arbitrary, but we know that special concessions in business, like "Special Privileges" in politics, are not the most desirable. It would be unfair to our cash customers

to extend your time thirty days beyond the limit. It would be equally unfair to you to give another thirty days more than we allow you.

The best way to give fairness of treatment to every one is simply to ask all our patrons alike to observe our regular terms.

Your account is now .... days past due. May we not have your check at once for the amount of $..........?

Yours very truly,

Letter No. 7

Dear Sir:-

Your account with us of $.......... covers goods sold and delivered on terms of thirty days. *Your promise to pay* and our promise to deliver were prominent features of the contract.

You received the goods but *we have not received the money for them* which omission has heretofore been ascribed to some oversight on your part.

We would very much dislike to *turn it over to some one for collection,* but your tardiness now makes any other course impossible, unless we receive your remittance by early mail.

Kindly return this letter and attach your check to it.

Very truly yours,

The following series is self-explanatory on reading and is well composed and worthy of study.

SERIES C

Letter No. 8

(Written on company stationery)

Dear Sir:-

You owe us an account and we need our money badly. Every opportunity has been afforded you to explain your failure to take care of this account as you agreed and we are compelled to assume that you are holding our money as a matter of convenience to yourself. This we do not consider fair as conditions neither warrant it nor allow us longer to ignore your lack of consideration.

We actually have banked on your account to-day by making draft on you through the bank specified on the enclosed statement

and you must protect both your own credit and ours by taking up the draft promptly.

You owe it to us to close this account now, to avoid any unpleasantness in our relations for you must naturally assume that further delay will require more drastic methods. No doubt your intentions are right but if you wish to complete this contract with us in the same good faith with which you entered into it you will appreciate this opportunity to do so.

Yours respectfully,

Letter No. 9

(Written on company stationery)

Dear Sir:-

"Huh! Another dunning letter. Those people needn't be so nervous. They'll get their money—some time."

That's probably what you said when you saw this letter, in fact, we almost heard you say it. Now instead of tossing this letter aside for "to-morrow" or junking it altogether, stop this time and consider *us* for a moment. We do not like to write dunning letters any more than you like to receive them, but you see you have some of our money, $......... Of course you intend to pay it. Let's square this thing up *now*. Don't read another letter until you have wrapped your check up in this one and returned it to us in the enclosed addressed envelope. By doing this you will rescue your name from our "unfair" list, and you do not know how much we will appreciate it.

Yours respectfully,

Letter No. 10

(Written on company stationery)

Dear Sir:-

We desire to direct your attention to your account with us amounting to $........, which is considerably past due, and to advise that this account has reached the point where we positively can not afford to carry it longer. We are simply calling your attention to the matter at this time in order that you may have an opportunity to adjust peacefully. We trust you will take advantage of it.

If you have any regard whatever for your honest and just obligations as well as for your local standing, and would not care

to have it known in your section that you violated the confidence which we placed in you at the time we extended the credit and made shipment of the goods, it will be up to you to remit at once.

We have shown you every consideration and surely have been patient with you. Our patience, however, is now exhausted and you will consider this letter as a final effort on our part to adjust to your interest, as with it we have exhausted all means to bring about an amicable settlement.

You surely must have some regards for your just debts, at least we assumed you had at the time we entered into the transaction. We only ask that you show us due consideration, such as you would expect were our positions reversed and we again want to impress on you that this letter is absolutely final.

Yours respectfully,

Letter No. 11

(Letter sent to bank on company stationery)

Dear Sir:-

The account covered by this draft is long past due and we need our money, otherwise we should not trouble you in asking that it be presented. We are willing and ready to pay for service rendered us and if draft is not paid we will remit to you direct when you have returned our draft. We need your assistance, and advice as to the most effective method of getting payment promptly and ask that in returning draft if unpaid, you advise us.

You might also recommend us to an energetic attorney in your vicinity inclined and in position to give this account prompt attention if you consider it advisable.

For your convenience please find enclosed stamped return envelope.

Yours respectfully,

Letter No. 12

(Letter written on House Collection Agency stationery)

Dear Sir:-

The above claim has been placed with us for adjustment with instruction to secure settlement at once. As we wish to afford you an opportunity to make an amicable settlement, we would like to have you advise us fully by return mail your reason for not taking care of this obligation.

We judge it is simply an oversight on your part. Your prompt attention will save yourself the embarrassment of having this matter taken into the court. It is hoped you will appreciate this courtesy and that this letter will meet with your prompt response in the way of a remittance.

Very truly yours,

Letter No. 13

(Letter written on House Collection Agency stationery)

Dear Sir:-

We are much surprised that you have made no response to our letter regarding this account recently referred to us for collection by our clients. It would seem to us that you would think too much of your local credit standing to allow this matter to be referred to our correspondent in your locality so we are delaying the bringing of suit simply to give you one more opportunity to arrange an amicable settlement.

However, unless some satisfactory understanding is reached within the next ten days we will instruct our attorney in your county to take immediate action to force payment.

Very truly yours,

Letter No. 14

(Letter written on company stationery)

Dear Sir:-

We beg to advise that we have your account amounting to $...... ready to be placed in the hands of our attorney in your county with instructions to bring suit without further delay, but before taking action, and fully realizing that it will be to your interests that this matter be settled peacefully, we are simply writing you at this time in order to give you an opportunity to settle in this manner.

We would suggest that you take advantage of this opportunity and forward to us your remittance at once. By so doing you will save yourself further embarrassment. Unless we hear from you by return mail with remittance, we will forward the account to our attorney with instructions to lose no further time.

Yours respectfully,

Letter No. 15

(Letter written on company stationery)

Dear Sir:-

We can hardly believe that it is your intention deliberately to beat us out of the account that you are owing us amounting to $........, although we must confess that the inattention on your part to our efforts to collect has almost led us to take it for granted that you are. Now all we want you to do is to write us indicating that you do not intend to pay. Our reason for making this request is the fact that we shipped you merchandise on the strength of the good name your friends and neighbors gave you. Your banker said you were honest and would pay your bills promptly. Others in your town made the same statement. We want you to write us refusing to pay the account so that we can write your friends and let them know just how badly they were mistaken in their opinion of you.

Your failure to answer this letter will be accepted by us as an indication that you refuse to pay and will be treated as such.

Yours respectfully,

The following three letters are a series that has stood the test and has produced results. They are self-explanatory.

SERIES D

Letter No. 16

Dear Sir:-

Your office has probably overlooked this account, as you have usually met your bills promptly at maturity. They are now past due and have in part forfeited your discount.

Will you kindly see that this is given prompt attention, as you will undoubtedly wish to avoid interest charges.

Yours very truly,

Letter No. 17

Dear Sir:-

The enclosed statement is one of a series of several that we have sent you, to which we have not had any response.

It is just possible this has been overlooked for some reason,

but since, quite contrary to your usual custom, the account is some time overdue, we assume that you will prefer to see it paid.

Yours very truly,

Letter No. 18

Dear Sir:-

We fear you are not attaching sufficient importance to the subject of your account, regarding which we have written to you several times. We dislike to occasion you more or unnecessary trouble, but you will simply force us to some such course unless you see fit to remit immediately to us the balance of the account due us.

There is owing us $...... and unless we have this remittance by prompt mail, we shall instruct our attorney to proceed.

Yours very truly,

The following is a regular collection letter where part of the bill has been paid.

Letter No. 19

Dear Sir:-

The purpose of this letter is to direct your prompt and active attention to the balance of your fall account.

On the threshold of our spring activities and especially in the present time of unusually difficult financing, we are really in need of the proceeds of our fall transactions for current manufacturing requirements.

We feel sure that this direct personal appeal will meet with your ready response, and accordingly shall look forward to an early remittance.

Truly yours,

The following letter asks payment of old past due account before shipping or even making up a new order.

Letter No. 20

Dear Sir:-

We have before us for consideration your valued order recently given our representative, for which we are appreciative and which we would like to place in work for you and get ready for shipment as stipulated upon the order.

We are somewhat handicapped, however, in this direction, from the fact that there is a past due indebtedness of yours still open on our books aggregating $598.00, that we should have had your check for before this.

Will you please assist us in the proper disposal of your order by clearing up this past due indebtedness with a prompt remittance and let us hear from you at once?

Yours very truly,

The following letter is used to explain matters where too great a discount has been deducted.

Letter No. 21

Dear Sir:-

We appreciate and thank you for your remittance of $..... but find that you have deducted greater discount than our terms provide for, and consequently we can not credit your remittance in complete settlement.

We have credited the payment in accordance with the enclosed statement, allowing you the best discount that we can under a proper interpretation of the discount terms, and on this basis there is a balance of $...... in our favor.

Will you please send us an additional remittance for this amount in order completely to adjust the account without delay?

Truly yours,

This letter carries with it a pamphlet explaining the Trade Acceptance.

Letter No. 22

Dear Sir:-

We want to bring to your attention a feature of the Federal Reserve Act that has a direct bearing upon business—your business—and our business, as distinguished from the purely banking features of the Act.

This little pamphlet tells in brief but explicit form the advantages to buyer and to seller, of the use of Trade Acceptances so called.

It tells how by use of this instrument the seller puts into liquid form the assets usually locked up in the book accounts,

enabling him to lower the expense of doing business and to reduce the costs of production and eventually lower prices.

It also shows how by the use of the Trade Acceptance the buyer secures the advantages that generally accrue to the cash buyer only, and places his credit upon stronger and higher basis.

We are asking the cooperation of our more responsible customers to utilize Trade Acceptances in our relations to each other and thus secure to both parties, you and ourselves, the substantial advantages that flow from their use.

We hope you will give this subject your earnest consideration and your favorable conclusions.

Yours very truly,

The following several letter bodies indicate that ingenuity and humor perhaps have a place in the writing of collection letters. In the use of these special letters the originator secured very direct results.

SERIES E

Letter No. 23

Dear Sir:-

A great deal of ingenuity is wasted in trying to extract money painlessly by correspondence. Sometimes a letter is written under a misapprehension of the facts as the customer sees them. Often a reference is made to an item which has been the subject of correspondence with another department. Like the "busy signal" this is irritating, but the irritation is unintentional.

All of which is preliminary to saying that there is past due on your account \$....... If your records agree with ours, please send us a check. If not, please thrash it out promptly with the writer.

Very truly yours,

Letter No. 24

Dear Sir:-

We have not heard from you in reply to our letter of (date) regarding your past due account, \$....... We may be a little too soon in our follow-up, but the amount is so small that it classifies as a clerical rather than a financial inconvenience on our books. We feel quite sure that it will not discommode you seriously to let us have your check and if you can do so by return mail we shall appreciate it.

Letter No. 25

Dear Sir:-

We have written you two letters on the subject of your past due account, $......, but have received no reply. We want to handle this the way that suits you and in the absence of advice from you to the contrary or a direct remittance we will on (week later) draw on you for that amount. Please let us know promptly if this is not the way you want the matter handled. We do not wish to annoy you; all we want is to get our money.

SERIES F

Letter No. 26

Dear Sir:-

Some one wrote us last month that we "pulled the wrong letter out of the bag" to fit his case. We wish we could draw them out of a bag. It would be easier and possibly just as effective. But we really write a separate letter to each customer and try to remind him in an inoffensive manner that his account is past due. It is much more to the credit of our customers than to ours that our letters seldom give offense.

There is $...... past due on your account. Kindly send us a check or a reason for postponing payment.

Letter No. 27

Dear Sir:-

Measured by results, that letter we wrote you (date) regarding your account was a dud. Perhaps it reached you at a bad time of the month. Maybe we are too prompt with our follow-up. Possibly we are growing too sure of ourselves and needed a lesson.

The lesson having soaked into our craniums that we are not such effective letter-writers after all, why not send us a check for $......?

SERIES G

Letter No. 28

Dear Sir:-

We would like to express a blanket appreciation for the way in which the letters from this department have been received. It

takes money to run business and we have no Trotzky press on which to print it. We must depend on our customers and they *always respond.*

There seems to be \$...... open and past due on your account. If your books agree, please send us a check. If they do not, kindly write us. Next to a remittance, we enjoy a cordial cooperating letter.

Letter No. 29

Dear Sir:-

Our letter of (date) regarding your small past due balance has not resulted in a reply as yet. Possibly we are a little too prompt in expecting it, but our biggest fault in the matter of collections is the speedy way in which we follow them up. We try to do this as courteously as possible but we must plead guilty to the sin of persistence. Can you let us have a check just as well as not for \$......?

SERIES H

Letter No. 30

Dear Sir:-

Occasionally we are complimented on the wording of a collection letter. Once in a while the same letter moves the recipient to anger. When the latter occurs we are sincerely troubled because an offended customer is a permanent loss which more than offsets the few days gained in getting our money. Our intent is to write just as courteously as we would say the same thing face to face.

In this instance you happen to be the victim of one of our efforts. There is past due on your account \$....... A remittance will be appreciated, or a correction if we are in error.

Letter No. 31

Dear Sir:-

You did not answer our letter of (date) regarding your account, \$....... Perhaps your regular routine is broken up by the vacation system. Maybe we have made a blunder and you are trusting to time to enlighten us. It would make it a lot easier for us if you would let us know just what is causing the delay.

Letter No. 32

Dear Sir:-

Our letters of (date) and (date) on the subject of your past due account, $......, do not seem to have elicited a response. If there is any reason why the account should not be paid we have no means of knowing what it is unless you tell us. Can't some one in your office take the time to write a check for this amount or a letter, telling us just why the account is not paid? We shall be very grateful for either.

SERIES I

Letter No. 33

Dear Sir:-

There is past due on your account $....... This includes all items older than (date).

There is no use camouflaging the fact that the purpose of this reminder is

(a) to get the money,

(b) to ascertain the cause of the delay or

(c) to uncover any difference that may exist between your books and ours.

And the greatest of these is (a).

Letter No. 34

Dear Sir:-

We are going to take a chance on crossing your remittance in the mail, and call your attention again to your past due account amounting to $......, regarding which we wrote you on (date). If you have not done so, we trust that you will either send us a check or advise us as to the cause of the delay. We do not want to become a nuisance to you and yet we would really like to know if there is any reason for additional delay in settling this account. We may be able to remove that reason.

Letter No. 35

Dear Sir:-

We have written you two letters regarding your past due account, $...... but without response. It may be possible that you are waiting for us to make a draft on you. We will assume

that such is the case and will draw on (week later) unless we hear from you in the meanwhile.

SERIES J

Letter No. 36

Dear Sir:-

Have you overlooked us? There is $...... open on your account older than (date). Do you desire any further details? If you have all the data necessary, kindly send us your check. If not, please write us.

Letter No. 37

Dear Sir:-

We trust we are not too prompt in following up our letter of (date), but your past due account, $...... is still open and we have not heard from you. We do not believe it will inconvenience you greatly to send us your check for this amount and it will be appreciated by us.

Letter No. 38

Dear Sir:-

We have written you two letters regarding your account, $......, but have had no reply. It is quite possible that you are waiting for us to draw on you. In the absence of advice from you we will on (week later) make a sight draft for the above amount. We prefer direct remittances and if you are of the same mind please send us your check so as to reach us before (date).

SERIES K

Letter No. 39

Dear Sir:-

Perhaps the fact has slipped your mind that you owe us $...... that is past due. Maybe you have mislaid the bill. There is possibly a good reason for the delay. Please send us a check or write us, addressing your letter to the attention of ....

Letter No. 40

Dear Sir:-

We trust that we are not too soon in calling your attention to our letter of (date) regarding your past due account, $.......

Our own needs are our excuse for writing you so promptly. Kindly send us a check by return mail.

Letter No. 41

Dear Sir:-

We have written you two letters regarding your small past due account, $......, but have had no reply. We can not possibly know what is delaying this payment unless you tell us. We will assume unless we hear from you that you are waiting to be drawn on and will make a sight draft (week later).

Please do not fail to advise us if for any reason you do not plan to honor this draft. It does not help us at the bank to make unnecessary sight drafts.

SERIES L

Letter No. 42

Dear Sir:-

About the most non-essential job in the U. S. A. should be Collection Letter No. 2. Our books show that there is past due on account $....... Please do not wait for another reminder. Either send us your check or a letter explaining the delay.

Letter No. 43

Dear Sir:-

We wrote you on (date) regarding your April account, $......, but have not heard from you. We assure you that the writing of these letters is neither a pleasure nor a perfunctory matter. We are considerably handicapped by delays in settlements of various accounts and we trust that you will not hold us up unnecessarily in sending us a check for the account.

Letter No. 44

Dear Sir:-

We do not know just why you do not reply to our letters regarding your April account, $....... We do not believe that you fully appreciate how much we are inconvenienced by your silence in connection with this bill. Please let us hear from you with a remittance or with a statement of your reason for withholding payment.

Letter No. 45

Dear Sir:-

We have written you three letters regarding your April account, $....... Please do something to relieve this situation as it is hardly fair to us to expect us to write for an indefinite period regarding a perfectly just and very much past due charge. If you need invoices, advise us. If you have the bills, send us a check. In any event, do something to break the silence at your end of the line.

Letter No. 46

Dear Sir:-

This is our fifth letter to you on the subject of an April bill, $...... and we might as well be pulling off a moving picture in a blind asylum so far as any attention to the subject in hand is concerned. Can not some one in your office make this a special order of business and at least acknowledge receipt of our letters and give some evidence of the fact that the matter is receiving attention?

The account is very much past due and the goods were sent you on thirty days' terms. Please let us hear from you.

CHAPTER V

Acceptances

Too much has already been written on the subject of acceptances, both bank and trade. The average man who has attempted to read all the articles, books, pamphlets, sermonettes and brochures that have been put into print during the past several years is liable to be so thoroughly befogged by the mass of material that he can not extract from the mass the few salient points of greatest importance. At its inception the campaign for the adoption of the acceptance was, in the opinion of the writer, surrounded by an artificial and insecure glamour of phrasing and example that instilled into the mind of altogether too many business men the feeling that the millennium of finance would be here if only the acceptance could be made the medium of payment. Acceptances became to be believed a kind of modern alchemy, skilled in the transmutation of two bad credits into one good one when joined by the bond of an acceptance.

This superenthusiasm produced a condition of financial mania that placed the acceptance before the average mind, not properly prepared, in a way that in many instances has led to serious misunderstandings concerning a perfectly useful and perfectly economic instrument when used in a logical and thoughtful manner. In its field the acceptance is a proper, useful and economical instrument to use. When, however, it is used as an artificial means to an uneconomic end it causes only disappointment and disquiet. The writer remembers an advertisement that came to his attention some time ago. It reads as follows:

GETTING YOUR MONEY BEFORE IT IS DUE

(Here was a reproduction of a specimen trade acceptance.)

A trade acceptance saves the transmission of cash and enables the creditor not only to arrange the definite date of payment with the debtor, but, if necessary, to secure the use of a sum, practically the equivalent of the debt, long before the debt is due in the ordinary course of business.

To the writer there appears to be a very serious anachronism in this rather circusy type of advertising that is misleading and harmful because it is unfair to the acceptance. The heading states that you get your money before it is due and then in the body of the ad speaks of a practical equivalent of the debt. First of all, the writer does not believe that the American business man expects or wishes to get anything before it is due him, being satisfied to get what is due him when it is due. In the second place, there is a serious question as to whether an acceptance is really a practical equivalent of payment which the heading infers. That it is a practical equivalent of the debt is probably true because it is an expression of the debt in another form and is therefore its equivalent. But the average inference that would be drawn is that by securing an acceptance the creditor had secured an equivalent of payment, and this is not what has happened. Why? Because first of all the debt is not paid until the acceptance has been honored. Secondly, when a debt is actually paid the creditor has the funds to use as he sees fit without any strings being tied to them. If, by rediscount, he wishes to take advantage of the liquidity of an acceptance he is put temporarily in funds, under the shadow of a contingent liability of endorsement. This

may at the time of maturity return in form to a direct debt by the non-payment on the part of the acceptor.

So it can be seen clearly that the securing of an acceptance is not, never has, and never will be a *payment in actuality* of a debt, payment being deferred by the credit nature and liquidity of the acceptance until the maturity of its due date. This draws a sharp distinction between the funds secured by actual payment which may be used without economic restriction and the acceptance which is a definite acknowledgment but not the actual payment of a debt. The fact that these two features have become confused is what has led to many of the misunderstandings and dissatisfactions on the part of the business man in connection with many of the restrictions that have been thrown around the use of the acceptance.

WHAT IS A TRADE ACCEPTANCE?

Because of its simplicity and exactness the writer quotes the description of an acceptance from the pamphlet *Trade Acceptances, What They Are and How They Are Used,* by Robert H. Treman, issued by the American Acceptance Council, as a reprint, in January, 1920. He says:

> "A trade acceptance is a time draft drawn by the seller of merchandise on the buyer for the purchase price of the goods and accepted by the buyer, payable on a certain date, at a certain place designated on its face."

In its physical aspect the acceptance takes the form of a draft with the addition of the acceptance on its face. The following is an example of such a form.

The trade acceptance being a draft, which can be forwarded for acceptance and completion at the time of shipping, when accepted forms a special acknowledgment of the debt incurred

TRADE ACCEPTANCE

FORM APPROVED BY THE
AMERICAN TRADE ACCEPTANCE COUNCIL

TRADE ACCEPTANCE

No.________

________________ ________ 191
(CITY OF DRAWER) (DATE)

ON________________ PAY TO THE ORDER OF OURSELVES
(DATE OF MATURITY)

________________ DOLLARS ($________)

THE OBLIGATION OF THE ACCEPTOR HEREOF ARISES OUT OF THE PURCHASE OF GOODS FROM THE DRAWER. THE DRAWEE MAY ACCEPT THIS BILL PAYABLE AT ANY BANK, BANKER OR TRUST COMPANY IN THE UNITED STATES WHICH HE MAY DESIGNATE.

TO________________
(NAME OF DRAWEE)

____
(STREET ADDRESS)

____
(CITY OF DRAWEE)

ACCEPTED

DATE ________

PAYABLE AT ________
(NAME OF BANK)

LOCATION OF BANK ________

____
(SIGNATURE OF ACCEPTOR)

BY ________

____
(SIGNATURE OF DRAWER)

BY________________

by the receipt of a certain order of goods of equal dating. It has this difference from an open account in that it is a negotiable instrument, of individualistic acknowledgment of a certain debt, instead of a restricted negotiability as is a book account, with a more general and much less exact acknowledgment of individual shipments.

This character of negotiability has led to the suggestion of two main things. First, that it would make it easier for the owner of an acceptance to render liquid his receivables by rediscounting the acceptance. Secondly, that this very liquidity of rediscount might tend to stimulate credit inflation.

TRADE ACCEPTANCES, LIQUID OR NON-LIQUID

In the relation between bank and borrower there are two main characteristics. The first of these is the confidence of the bank in the borrower, the belief that the borrower is sound, from the credit standpoint, and that he will pay his debts when and as they become due. Based on this premise the bank is ready, when able, to extend to the customer the equivalent of money with which he can settle his other debts. This second characteristic is approximate to a cash transaction because with the proceeds of the credit the debtor can pay his other creditors and annul their debts. It is strongly reminiscent of the story of the young man who was advised by his mentor to pay his debts and answered, "Willingly, my lord, if you can tell me where to borrow the money."

The point of the argument is that in giving a customer credit by discounting an acceptance the bank has to dip into its available loanable funds to the same extent as it would have to do if it loaned the customers the same amount on a straight note. There is no practical difference in the strain on individual banking loan-

able funds. There is little or no economic difference in loaning the customer money direct and allowing the customer to carry his accounts, or extending him assistance from the same pot of loanable funds, carrying them for him on his guaranty by endorsement of a negotiable instrument, except in security to the bank. The amount of extension is the same and the strain on the whole amount of the loanable funds is the same, and the banking point of strain is the same.

The difference lies in the fact that the discounting of trade acceptances relieves the commercial man from performing a banking function in the carrying of his accounts and places the operation within the physical zone of banking operations. This is perhaps as it should be and is, after all, one of the main arguments for the development of the acceptance instrument. The whole business of the bank is based on the scientific accumulation and economic management of credit, and by centralizing credit operations within the banking machine we are pretty certain to accomplish a more economical use and a more scientific distribution of the whole supply of available, loanable funds. But the commercial man must not be too impatient of direct results from the basic economies that can eventually be developed by such a system when at last it may reach its highest efficiency. The business man has been led to expect much cheaper borrowing rates for his acceptances and in many instances is turning against the acceptance because these cheaper rates have not been forthcoming in any great degree. Banking practises change slowly and as yet it has not become common to attach much weight to the strength of the acceptor, except in exceptional instances, relying almost solely on the strength of the endorsement when extending credit by discounting an acceptance.

But one point stands out preeminent in the whole scheme,

and that is that the development of an acceptance technique on the part of the bankers, that will in the end attach importance to the strength of the acceptor, can not be hoped for in a one-sided use of the acceptance. If known strong houses are to push the development of the acceptance among their smaller and less well-known customers but in turn refuse consistently to create acceptances themselves they will by that action largely vitiate any attachment of confidence to the strength of the acceptor and a consequent differential rate. If the scheme can be carried through as a whole and without favoritism such a differential might logically be looked for when using the acceptance as a means of securing bank accommodations, especially for two good names.

THE BANK ACCEPTANCE

A banker's acceptance, as defined by a regulation of The Federal Reserve Board, is "a bill of exchange of which the acceptor is a bank, or trust company, or a firm, person, company or corporation engaged in the business of granting bankers' acceptance credits."

A very large part of the uncertainty and heartburn in connection with the whole acceptance propaganda lies in the misunderstandings as between the two instruments. A very clear demarcation as between these two was made by Mr. John E. Rovensky, Vice-President of the National Bank of Commerce, New York City, in an address delivered before the meeting of the New York Credit Men's Association on November 10, 1920. Acknowledgment of the thought stimulus of this address, in the following argument, is freely and thoughtfully given here.

In discussing the trade acceptance the point of the credit strain came in the same place, as far as the supply of credit was concerned, because the same bank loaning the money was directly

stressed. In this method, the bankers' acceptance, the strain upon the source of supply, is distinctly different for a very basic reason.

The practise of borrowing on the straight note or by discounting of trade acceptances with a bank of deposit, lacking an open market, necessitates both the willingness to extend credit, and the supplying of the funds. But, by its operation, the use of the bankers' acceptance very largely removes this Siamese condition. It is not only possible but easy and probable that, by use of the bankers' acceptance, the supplying of the confidence and the cash will be separate and divided operations and responsibilities.

A bank in assuming the position of acceptor does not of necessity advance from its own supply of loanable funds the money needed to put its customer in the position of bettering its own cash condition. The story of the physical actions in connection with the creation of a bankers' acceptance may make this point clearer. A customer of a bank has need of funds and the confidence of the bank in his standing is such that they believe the risk a good one. The credit file is complete and indicates that the customer is fully worthy of the risk. But the bank itself is cramped for funds at the moment, due to some local or seasonal heavy demand for credit accommodation and, while it believes fully in the goodness of the risk, can not combine that confidence with the action of supplying of money or deposit credit. It is willing to assume the purely credit side of the risk. The bank therefore arranges with the customer to draw on it for thirty or sixty or ninety days' maturity and itself accepts this draft thereby creating a bankers' acceptance. This instrument, due to the standing of the bank and the fact that its condition is a matter of official inspection and public record, becomes at once an instrument for which there is a very large market and at a somewhat differential rate. The customer can then dispose of this instru-

ment in this broader market and be placed in funds, not from the supply of his own bank, but from the general national, and in some instances international, reservoir of credit. The operation of disposing of the instrument can most generally be put through by the bank at the customer's request. This can the more easily be done because the bank knows the sources of supply and the markets for this kind of document better than the individual.

What has happened is that the bank has loaned its credit but has not necessarily drawn on its own loanable funds. For this accommodation the bank exacts a reasonable charge which, plus the rate of discount on the acceptance, is the cost of the money to the customer. The bank has practically assumed the position of guarantor on the draft. It must pay the acceptance when due whether its customer is in a position to pay or not and has practically certified the draft as it might certify a check.

This relation of having confidence enough in the credit of its customer to certify to it, can also be operated in another way. In certain instances the customer may arrange to have some one, from whom he buys certain supplies, draw on his bank, the draft having the proper shipping documents attached. The bank will then accept the draft and under proper arrangements surrender the documents to its customer. The seller then has a bankers' acceptance, with all its marketability and security, in payment for his goods. He may hold this to maturity or may arrange for its sale direct to or through his own bank. The customer has title to the goods and time to accumulate funds to reimburse his bank by the time it must meet and pay the acceptance. The bank has exercised its judgment on the credit risk and has financed the transaction for its customer upon its own credit without creating any immediate strain on its own available loanable funds. The acceptance finds its way to the portfolio of some one with funds to

invest, who will hold it to maturity, or, needing funds in the interim, will sell it again,—the acceptance floating always toward the market in which loanable funds are most in evidence.

While much more could be written about the advantages and uses of both kinds of acceptances this most important distinction, once clearly understood, may help to clear up many of the misunderstandings and complaints because certain things have been thought possible of performance with one instrument that were clearly only within the province of economic and even legal activity of the other.

A WORD OF CAUTION

Much has been said about credit being frozen when in the shape of accounts receivable and liquid when in the shape of trade acceptances. The element of liquidity would only be more present in the case of trade acceptances if they were used as a borrowing instrument. If all the accounts of any house were transformed into trade acceptances and if these trade acceptances were held to maturity, and if the maturity were of the same trade terms as the accounts, as it should be, then very little liquidity would be present above the liquidity of the account receivable. Liquidity would be potential perhaps but not actual, unless used.

This potentiality may be a danger unappreciated by a commercial house that decides to turn it into actual liquidity by discounting the trade acceptances held by it. One of the well-founded and deep-seated principles of banking is that no bank cares to extend credit to any house on a different basis of safety than does another bank. If a commercial house is selling its paper in the open market or if it is receiving lines of credit from several banks it must be very careful not to differentiate between banks, giving one its straight name paper and the other double

name paper by discounting trade acceptances with it. In such a case it may find that the bank that had been extending accommodation on the single name might consider its paper not on a par with the bank having double name paper and it would not be surprising if it were to withdraw its lines or at least greatly modify them. A name selling its straight paper in the open market might discover that the broker would find its paper hard to sell if it became known that it was also discounting its trade acceptances with some bank of deposit or otherwise. It is therefore good policy to stick to one kind of borrowing method, if the credit volume is to be unquestionably maintained.

There follows some quotations from the *Federal Reserve Bulletin* that are of interest in connection with rediscounts:

REGULATIONS OF THE FEDERAL RESERVE BOARD

WASHINGTON, *October 6, 1920*

The Federal Reserve Board transmits herewith a new issue of all of its regulations of 1917 applicable to member banks. Regulation L, relating to "Interlocking bank directorates under the Clayton Act," is entirely new. Regulation F of the new series supersedes Regulation F, Series of 1919, and Regulation K of the new series supersedes Regulation K, Series of 1920, issued in March of the present year. The other regulations of the new series supersede the corresponding regulations of the 1917 series.

Regulations A, B, and I have been materially amended. Regulation C has been amended only by the insertion of two sentences in the first paragraph with reference to the question of when trust receipts and bills of lading drafts may be considered "actual security" within the meaning of section 13 of the Federal Reserve Act. There have been no amendments to Regulation D with the exception of two changes intended to make clear that in the case of "time deposits, open accounts," the thirty days' written notice of withdrawal must be actually required by the bank, whereas in the case of "savings accounts" and "time certificates of deposit" the requirement of notice will be complied with if the bank reserves the right to demand thirty days' written notice of

withdrawals. The only substantial change in Regulation K is an amendment to the paragraph entitled "Acceptances," which permits corporations organized under the provisions of section 25a of the Federal Reserve Act to accept, subject to substantially the same conditions as are imposed by law upon member banks, drafts drawn by banks or bankers located in foreign countries, or dependencies or insular possessions of the United States, for the purpose of furnishing dollar exchange as required by the usages of trade in those countries, dependencies, or possessions. There have been no substantial changes in Regulations F and H, and Regulations E and G are identically the same as in the 1917 series.

Regulation J, relating to "Check clearing and collection," has not been changed in substance except that certain provisions have been struck out which aré no longer applicable. Nothing has been added to this regulation and it contains only very general provisions. At the present time conditions vary so much in the different districts that it is impracticable to formulate detailed regulations on this subject to be applied in all districts. The Federal Reserve Board will consider a revision of this regulation if and when future developments make it seem practicable and advisable to issue a more comprehensive regulation.

Instructions which concern only Federal Reserve Agents or Federal Reserve Banks will be covered in separate letters or regulations, as in the past.

W. P. G. Harding, *Governor.*

W. T. Chapman, *Secretary.*

REGULATION A, SERIES OF 1920.

(Superseding Regulation A of 1917.)

Rediscounts Under Section 13.

A. NOTES, DRAFTS, AND BILLS OF EXCHANGE

I. General statutory provisions.

Any Federal Reserve Bank may discount for any of its member banks any note, draft, or bill of exchange, provided —

(*a*) It has a maturity at the time of discount of not more than ninety days, exclusive of days of grace; but if drawn or issued for agricultural purposes or based on live stock, it may have a maturity at the time of discount of not more than six months, exclusive of days of grace.

(*b*) It arose out of actual commercial transactions; that is,

it must be a note, draft, or bill of exchange which has been issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used or are to be used for such purposes.

(*c*) It was not issued for carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States.

(*d*) The aggregate of notes, drafts, and bills bearing the signature or indorsement of any one borrower, whether a person, company, firm, or corporation, rediscounted for any one member bank, whether State or National, shall at no time exceed ten per cent.[1] of the unimpaired capital and surplus of such bank; but this restriction shall not apply to the discount of bills of exchange drawn in good faith against actually existing values.

(*e*) It is indorsed by a member bank.

(*f*) It conforms to all applicable provisions of this regulation.

No Federal Reserve Bank may discount for any member State bank or trust company any of the notes, drafts, or bills of any one borrower who is liable for borrowed money to such State bank or trust company in an amount greater than ten per cent.[2] of the capital and surplus of that State bank or trust company, but in determining the amount of money borrowed from such State bank or trust company the discount of bills of exchange drawn

[1]Under the terms of section 11 (*m*) as amended by the act of Mar. 3, 1919, a Federal Reserve Bank may, until Dec. 31, 1920, rediscount for any member bank, whether State or National, notes, drafts, and bills bearing the signature or indorsement of any one borrower in an amount not to exceed twenty per cent of the member bank's capital and surplus, provided that the excess over and above ten per cent. be secured by not less than a like face amount of bonds or notes of the United States issued since Apr. 24, 1917, or certificates of indebtedness of the United States.

[2]Under the terms of section 11 (*m*) as amended by the act of Mar. 3, 1919, a Federal Reserve Bank may, until Dec. 31, 1920, rediscount for a member State bank or trust company paper of any one borrower secured by not less than a like face amount of bonds or notes of the United States issued since Apr. 24, 1917, or certificates of indebtedness of the United States, even though such State bank or trust company may already have loaned to the borrower under his regular line of credit in excess of the ten per cent. limit defined above. If, however, the member State bank or trust company has loaned to one borrower in excess of that ten per cent. limit under his regular line of credit the Federal Reserve Bank can not rediscount for that State bank or trust company any of the paper of that borrower taken under that regular line of credit, but may rediscount any paper so secured by Government obligations of the kinds specified up to an amount not in access of twenty per cent. of the capital and surplus of such State bank or trust company.

in good faith against actually existing value and the discount of commercial or business paper actually owned by the person negotiating the same shall not be included.

Any Federal Reserve Bank may make advances to its member banks on their promissory notes for a period not exceeding fifteen days, provided that they are secured by notes, drafts, bills of exchange, or bankers' acceptances which are eligible for rediscount or for purchase by Federal Reserve Banks, or by the deposit or pledge of bonds or notes of the United States, or bonds of the War Finance Corporation.

II. General character of notes, drafts, and bills of exchange eligible.

The Federal Reserve Board, exercising its statutory right to define the character of a note, draft, or bill of exchange eligible for rediscount at a Federal Reserve Bank, has determined that—

(*a*) It must be a note, draft, or bill of exchange which has been issued or drawn, or the proceeds of which have been used or are to be used, in the first instance, in producing, purchasing, carrying, or marketing goods[1] in one or more of the steps of the process of production, manufacture, or distribution, or for the purpose of carrying or trading in bonds or notes of the United States.

(*b*) It must not be a note, draft, or bill of exchange the proceeds of which have been used or are to be used for permanent or fixed investments of any kind, such as land, buildings, or machinery, or for any other capital purpose.

(*c*) It must not be a note, draft, or bill of exchange the proceeds of which have been used or are to be used for investments of a purely speculative character or for the purpose of lending to some other borrower.

(*d*) It may be secured by the pledge of goods or collateral of any nature, including paper, which is ineligible for rediscount, provided it (the note, draft, or bill of exchange) is otherwise eligible.

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[1]When used in this regulation, the word "goods" shall be construed to include goods, wares, merchandise, or agricultural products, including live stock.

III. Applications for rediscount.

All applications for the rediscount of notes, drafts, or bills of exchange must contain a certificate of the member bank, in form to be prescribed by the Federal Reserve Bank, that, to the best of its knowledge and belief, such notes, drafts, or bills of exchange have been issued for one or more of the purposes mentioned in II (*a*), and, in the case of a member State bank or trust company, all applications must contain a certificate or guaranty to the effect that the borrower is not liable, and will not be permitted to become liable during the time his paper is held by the Federal Reserve Bank, to such bank or trust company for borrowed money in an amount greater than that specified in I above.

IV. Promissory notes.

(*a*) DEFINITION.—A promissory note, within the meaning of this regulation, is defined as an unconditional promise, in writing, signed by the maker, to pay, in the United States, at a fixed or determinable future time, a sum certain in dollars to order or to bearer.

(*b*) EVIDENCE OF ELIGIBILITY AND REQUIREMENT OF STATEMENTS.—A Federal Reserve Bank must be satisfied by reference to the note or otherwise that it is eligible for rediscount. The member bank shall certify in its application whether the note offered for rediscount has been discounted for a depositor other than a bank or for a nondepositor and, if discounted for a bank, whether for a member or a non-member bank. The member bank must also certify whether a financial statement of the borrower is on file with it.

A recent financial statement of the borrower must be on file with the member bank in all cases, except with respect to any note discounted by a member bank for a depositor other than a bank or another member bank if—

(1) It is secured by a warehouse, terminal, or other similar receipt covering goods in storage, or by bonds or notes of the United States; or

(2) The aggregate of obligations of the borrower rediscounted and offered for rediscount at the Federal Reserve Bank by the member bank is less than a sum equal to ten per cent. of the paid-in capital of the member bank and is less than $5,000.

The Federal Reserve Bank shall use its discretion in taking the steps necessary to satisfy itself as to eligibility. Compliance

of a note with II (b) may be evidenced by a statement of the borrower showing a reasonable excess of quick assets over current liabilities. A Federal Reserve Bank may, in all cases, require the financial statement of the borrower to be filed with it.

V. Drafts, bills of exchange, and trade acceptances.

(a) Definition.—A draft or bill of exchange, within the meaning of this regulation, is defined as an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay in the United States at a fixed or determinable future time a sum certain in dollars to the order of a specified person; and a trade acceptance is defined as a draft or bill of exchange, drawn by the seller on the purchaser of goods sold,[1] and accepted by such purchaser.

(b) Evidence of eligibility and requirement of statements.—A Federal Reserve Bank shall take such steps as it deems necessary to satisfy itself as to the eligibility of the draft, bill, or trade acceptance offered for rediscount and may require a recent financial statement of one or more parties to the instrument. The draft, bill, or trade acceptance should be drawn so as to evidence the character of the underlying transaction, but if it is not so drawn evidence of eligibility may consist of a stamp or certificate affixed by the acceptor or drawer in a form satisfactory to the Federal Reserve Bank.

VI. Six months' agricultural paper.

(a) Definition.—Six months' agricultural paper, within the meaning of this regulation, is defined as a note, draft, bill of exchange, or trade acceptance drawn or issued for agricultural purposes, or based on live stock; that is, a note, draft, bill of exchange, or trade acceptance the proceeds of which have been used, or are to be used, for agricultural purposes, including the breeding, raising, fattening, or marketing of live stock, and which has a maturity at the time of discount of not more than six months, exclusive of days of grace.

[1] A consignment of goods or a conditional sale of goods can not be considered "goods sold" within the meaning of this clause. The purchase price of goods plus the cost of labor in effecting their installation may be included in the amount for which the trade acceptance is drawn.

(b) Eligibility.—To be eligible for rediscount, six months' agricultural paper, whether a note, draft, bill of exchange, or trade acceptance, must comply with the respective sections of this regulation which would apply to it if its maturity were ninety days or less.

B. BANKERS' ACCEPTANCES.

(a) Definition.—A banker's acceptance within the meaning of this regulation is defined as a draft or bill of exchange, whether payable in the United States or abroad and whether payable in dollars or some other money, of which the acceptor is a bank or trust company, or a firm, person, company, or corporation engaged generally in the business of granting bankers' acceptance credits.

(b) Eligibility.—A Federal Reserve Bank may rediscount any such bill having a maturity at time of discount of not more than three months, exclusive of days of grace, which has been drawn under a credit opened for the purpose of conducting or settling accounts resulting from a transaction or transactions involving any one of the following:

(1) The shipment of goods between the United States and any foreign country, or between the United States and any of its dependencies or insular possessions, or between foreign countries. While it is not necessary that shipping documents covering goods in the process of shipment be attached to drafts drawn for the purpose of financing the exportation or importation of goods, and while it is not essential, therefore, that each such draft cover specific goods actually in existence at the time of acceptance, nevertheless it is essential as a prerequisite to eligibility either (*a*) that shipping documents or a documentary export draft be attached at the time the draft is presented for acceptance, or (*b*) if the goods covered by the credit have not been actually shipped, that there be in existence a specific and bona fide contract providing for the exportation or importation of such goods at or within a specified and reasonable time and that the customer agree that the accepting bank will be furnished in due course with shipping documents covering such goods or with exchange arising out of the transaction being financed by the credit. A contract between principal and agent will not be considered a bona fide contract of the kind required above, nor is it enough that there be a contract providing merely that the proceeds of the acceptance will be used only to finance the purchase or shipment of goods to be exported or imported.

(2) The shipment of goods within the United States, provided shipping documents conveying security title are attached at the time of acceptance, or

(3) The storage of readily marketable staples,[1] provided that the bill is secured at the time of acceptance by a warehouse, terminal, or other similar receipt, conveying security title to such staples, issued by a party independent of the customer, and provided further that the acceptor remains secured throughout the life of the acceptance. In the event that the goods must be withdrawn from storage prior to the maturity of the acceptance or the retirement of the credit, a trust receipt or other similar document covering the goods may be substituted in lieu of the original document, provided that such substitution is conditioned upon a reasonably prompt liquidation of the credit. In order to insure compliance with this condition, it should be required, when the original document is released, either (*a*) that the proceeds of the goods will be applied within a specified time toward a liquidation of the acceptance credit or (*b*) that a new document, similar to the original one, will be resubstituted within a specified time, and a Federal Reserve Bank may also rediscount any bill drawn by a bank or banker in a foreign country or dependency or insular possession of the United States for the purpose of furnishing dollar exchange, as provided in Regulation C, provided that it has a maturity at the time of discount of not more than three months, exclusive of days of grace.

(c) GENERAL CONDITIONS.—(*1*) *Acceptances in excess of ten per cent.*—In order to be eligible, acceptances for any one customer in excess of ten per cent. of the capital and surplus of the accepting bank must remain actually secured throughout the life of the acceptance. In the case of acceptances of member banks this security must consist of shipping documents, warehouse receipts or other such documents, or some other actual security growing out of the same transaction as the acceptance, such as documentary drafts, trade acceptances, terminal receipts, or trust receipts which cover goods of such a character as to insure at all times a continuance of an effective and lawful lien in favor of the accepting bank. Other trust receipts are not

[1] A readily marketable staple within the meaning of these regulations may be defined as an article of commerce, agriculture, or industry of such uses as to make it the subject of constant dealings in ready markets with such frequent quotations of price as to make (*a*) the price easily and definitely ascertainable and (*b*) the staple itself easy to realize upon by sale at any time.

security within the meaning of this paragraph if they permit the customer to have access to or control over the goods.

(*2*) *Maturity.*—Although a Federal Reserve Bank may legally rediscount an acceptance having a maturity at the time of discount of not more than three months, exclusive of days of grace, it may decline to rediscount any acceptance the maturity of which is in excess of the usual or customary period of credit required to finance the underlying transaction or which is in excess of that period reasonably necessary to finance such transaction. Since the purpose of permitting the acceptance of drafts secured by warehouse receipts or other such documents is to permit of the temporary holding of readily marketable staples in storage pending a reasonably prompt sale, shipment, or distribution, no such acceptance should have a maturity in excess of the time ordinarily necessary to effect a reasonably prompt sale, shipment, or distribution into the process of manufacture or consumption.

(*3*) *Renewals.*—While a national bank may properly enter into an agreement having more than six months to run by which it obligates itself to accept drafts of the kinds described in Regulation C, each individual draft accepted under the terms of that agreement must, in order to be eligible, conform in all respects to the provisions of the law and these regulations. Inasmuch as each individual acceptance must itself conform to the terms of the law, no renewal draft whether or not contracted for in advance, can be eligible if at the time of its acceptance the period required for the conclusion of the transaction out of which the original draft was drawn shall have elapsed. The question of the eligibility of renewal drafts, therefore, must necessarily depend upon the stage of the transaction at the time the renewal drafts are drawn.

(d) Evidence of eligibility.—A Federal Reserve Bank must be satisfied either by reference to the acceptance itself or otherwise that it is eligible for rediscount. The bill itself should be drawn so as to evidence the character of the underlying transaction, but if it is not so drawn evidence of eligibility may consist of a stamp or certificate affixed by the acceptor in form satisfactory to the Federal Reserve Bank.

REGULATION B, SERIES OF 1921.

(Superseding Regulation B of 1920.)

Open-Market Purchases of Bills of Exchange, Trade Acceptances, and Bankers' Acceptances Under Section 14.

I. General statutory provisions.

Section 14 of the Federal Reserve Act provides that Federal Reserve Banks under rules and regulations to be prescribed by the Federal Reserve Board may purchase and sell in the open market, at home or abroad, from or to domestic or foreign banks, firms, corporations, or individuals, bankers' acceptances and bills of exchange of the kinds and maturities made eligible by the act for rediscount, with or without the indorsement of a member bank.

II. General character of bills and acceptances eligible.

The Federal Reserve Board, exercising its statutory right to regulate the purchase of bills of exchange and acceptances, has determined that a bill of exchange or acceptance to be eligible for purchase by Federal Reserve Banks under this provision of section 14, must have been accepted by the drawee prior to such purchase unless it is either accompanied or secured by shipping documents or by warehouse, terminal or other similar receipt conveying security title or bears a satisfactory banking indorsement, and must conform to the relative requirements of Regulation A, except that—

(*a*) A banker's acceptance growing out of a transaction involving the importation or exportation of goods may be purchased if it has a maturity not in excess of six months, exclusive of days of grace, provided that it conforms in other respects to the relative requirements of Regulation A and

(*b*) A banker's acceptance growing out of a transaction involving the storage within the United States of goods actually under contract for sale and not yet delivered or paid for may be purchased, provided that the acceptor is secured by the pledge of such goods; and provided further that the acceptance conforms in other respects to the relative requirements of Regulation A.

III. Statements.

A bill of exchange, unless indorsed by a member bank, is not eligible for purchase until a satisfactory statement has been fur-

nished of the financial condition of one or more of the parties thereto.

A banker's acceptance, unless accepted or indorsed by a member bank, is not eligible for purchase until the acceptor has furnished a satisfactory statement of its financial condition in form to be approved by the Federal Reserve Bank and has agreed in writing with a Federal Reserve Bank to inform it upon request concerning the transaction underlying the acceptance.

REGULATION C, SERIES OF 1920.

(Superseding Regulation C of 1917.)

Acceptance by Member Banks of Drafts and Bills of Exchange.

A. ACCEPTANCE OF DRAFTS OR BILLS OF EXCHANGE DRAWN AGAINST DOMESTIC OR FOREIGN SHIPMENTS OF GOODS OR SECURED BY WAREHOUSE RECEIPTS COVERING READILY MARKETABLE STAPLES.

I. Statutory provisions.

Under the provisions of the fifth paragraph of section 13 of the Federal Reserve Act, as amended by the acts of September 7, 1916, and June 21, 1917, any member bank may accept drafts or bills of exchange drawn upon it, having not more than six months' sight to run, exclusive of days of grace, which grow out of transactions involving the importation or exportation of goods; or which grow out of transactions involving the domestic shipment of goods, provided shipping documents conveying or securing title are attached at the time of acceptance; or which are secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title covering readily marketable staples.[1] This paragraph limits the amount which any bank shall accept for any one person, company, firm, or corporation, whether in a foreign or domestic transaction, to an amount not exceeding at any time, in the aggregate, more than ten per centum of its paid-up and unimpaired capital stock and surplus. This limit, however, does not apply in any case where the accepting bank remains secured either by attached documents or by some other actual security growing out of the same transaction as the acceptance. A trust receipt which permits the customer to

[1] A readily marketable staple within the meaning of these regulations may be defined as an article of commerce, agriculture, or industry of such uses as to make it the subject of constant dealings in ready markets with such frequent quotations of price as to make (*a*) the price easily and definitely ascertainable and (*b*) the staple itself easy to realize upon by sale at any time.

have access to or control over the goods will not be considered by Federal Reserve Banks to be "actual security" within the meaning of section 13. A bill of lading draft, however, is "actual security" even after the documents have been released, provided that the draft is accepted by the drawee upon or before the surrender of the documents. The law also provides that any bank may accept such bills up to an amount not exceeding at any time, in the aggregate, more than one-half of its paid-up and unimpaired capital stock and surplus; or, with the approval of the Federal Reserve Board, up to an amount not exceeding at any time, in the aggregate. more than one hundred per centum of its paid-up and unimpaired capital stock and surplus. In no event, however, shall the aggregate amount of acceptances growing out of domestic transactions exceed fifty per centum of such capital stock and surplus.

II. Regulations.

1. Under the provisions of the law referred to above the Federal Reserve Board has determined that any member bank, having an unimpaired surplus equal to at least twenty per centum of its paid-up capital, which desires to accept drafts or bills of exchange drawn for the purposes described above, up to an amount not exceeding at any time, in the aggregate, one hundred per centum of its paid-up and unimpaired capital stock and surplus, may file an application for that purpose with the Federal Reserve Board. Such application must be forwarded through the Federal Reserve Bank of the district in which the applying bank is located.

2. The Federal Reserve Bank shall report to the Federal Reserve Board upon the standing of the applying bank, stating whether the business and banking conditions prevailing in its district warrant the granting of such applications.

3. The approval of any such application may be rescinded upon ninety days' notice to the bank affected.

B. ACCEPTANCE OF DRAFTS OR BILLS OF EXCHANGE DRAWN FOR THE PURPOSE OF CREATING DOLLAR EXCHANGE.

I. Statutory provisions.

Section 13 of the Federal Reserve Act also provides that any member bank may accept drafts or bills of exchange drawn

upon it having not more than three months' sight to run, exclusive of days of grace, drawn, under regulations to be prescribed by the Federal Reserve Board, by banks or bankers in foreign countries or dependencies or insular possessions of the United States for the purpose of furnishing dollar exchange as required by the usages of trade in the respective countries, dependencies, or insular possessions.

No member bank shall accept such drafts or bills of exchange for any one bank to an amount exceeding in the aggregate ten per centum of the paid-up and unimpaired capital and surplus of the accepting bank unless the draft or bill of exchange is accompanied by documents conveying or securing title or by some other adequate security. No member bank shall accept such drafts or bills in an amount exceeding at any time in the aggregate one-half of its paid-up and unimpaired capital and surplus. This fifty per cent. limit is separate and distinct from and not included in the limits placed upon the acceptance of drafts and bills of exchange as described under section A of this regulation.

II. Regulations.

Any member bank desiring to accept drafts drawn by banks or bankers in foreign countries or dependencies or insular possessions of the United States for the purpose of furnishing dollar exchange shall first make an application to the Federal Reserve Board setting forth the usages of trade in the respective countries, dependencies, or insular possessions in which such banks or bankers are located.

If the Federal Reserve Board should determine that the usages of trade in such countries, dependencies, or possessions require the granting of the acceptance facilities applied for, it will notify the applying bank of its approval and will also publish in the Federal Reserve Bulletin the name or names of those countries, dependencies, or possessions in which banks or bankers are authorized to draw on member banks whose applications have been approved for the purpose of furnishing dollar exchange.

The Federal Reserve Board reserves the right to modify or on ninety days' notice to revoke its approval either as to any particular member bank or as to any foreign country or dependency or insular possession of the United States in which it has authorized banks or bankers to draw on member banks for the purpose of furnishing dollar exchange.

REGULATION D, SERIES OF 1920.
(Superseding Regulation D of 1917.)
TIME DEPOSITS AND SAVINGS ACCOUNTS.

Section 19 of the Federal Reserve Act provides, in part, as follows:

Demand deposits, within the meaning of this act, shall comprise all deposits payable within thirty days, and time deposits shall comprise all deposits payable after thirty days, and all savings accounts and certificates of deposit which are subject to not less than thirty days' notice before payment, and all postal savings deposits.

Time deposits, open accounts.

The term "time deposits, open accounts" shall be held to include all accounts, not evidenced by certificates of deposits or savings pass books, in respect to which a written contract is entered into with the depositor at the time the deposit is made that neither the whole nor any part of such deposit may be withdrawn by check or otherwise, except on a given date or on written notice which must be given by the depositor a certain specified number of days in advance, in no case less than thirty days.

Savings accounts.

The term "saving accounts" shall be held to include those accounts of the bank in respect to which, by its printed regulations, accepted by the depositor at the time the account is opened—

(*a*) The pass book, certificate, or other similar form of receipt must be presented to the bank whenever a deposit or withdrawal is made, and

(*b*) The depositor may at any time be required by the bank to give notice of an intended withdrawal not less than thirty days before a withdrawal is made.

Time certificates of deposit.

A "time certificate of deposit" is defined as an instrument evidencing the deposit with a bank, either with or without interest, of a certain sum specified on the face of the certificate payable in whole or in part to the depositor or on his order—

(*a*) On a certain date, specified on the certificate, not less than thirty days after the date of the deposit, or

(*b*) After the lapse of a certain specified time subsequent to the date of the certificate, in no case less than thirty days, or

(*c*) Upon written notice, which the bank may at its option require to be given a certain specified number of days, not less than thirty days, before the date of repayment, and

(*d*) In all cases only upon presentation of the certificate at each withdrawal for proper indorsement or surrender.

CHAPTER VI

The Financial Statement

The financial or property statement and its analysis is one of the important factors in the determination of the goodness of a risk. But it is not the complete measure, as there are several other elements in the make-up of the risk that are extremely important. In order to place the property statement where it belongs and give it full weight without over-exaggerating its importance it may be well to discuss this matter somewhat before taking up the statement itself.

As seen by the writer there are three main divisions in considering a risk. The first of these is its static condition, the second its dynamic condition and third the general condition of the times, in the economic balance of affairs.

THE STATIC RISK

The phrase "static risk" is used for want of a more accurate description of that phase of the study. The word static is defined in *Webster's* under its economic measuring as follows: "Dealing with absolute quantities of goods or money rather than with rates of movement from hand to hand, such as income."

The static element is then an analysis of the actual quantities or volumes of goods or wealth which the risk has accumulated and has at its disposal for the payment of its debts and the further carrying on of its business affairs.

The static elements are displayed before the creditor in a

property statement giving the sum total of the wealth under control, the assets, and the debts against the same. The margin between these two represents the wealth actually owned by the management and is the cushion of shrinkage in assets protecting the creditor. The actual analysis of this part of the risk will be taken up and considered in detail in several other chapters.

THE DYNAMIC RISK

Dynamic is defined in *Webster's* as: "Belonging to, or characterized by, energy or effective action; potent; forceful."

Using the word in this general way then means that the dynamic risk differentiates between the mere bulk of goods already secured and available and the energy or effectiveness in active management that makes the development and securing of profits possible.

This element in analysis has more often been called the "moral risk." But this phrase lacks the touch of punch and effectiveness that should be a prominent factor in this section of the risk. The phrase, however, is supposed to cover not only the character of the management from its ethical side but from its driving ability in the field of efficient production and creation of profits.

While the mere statement of assets and liabilities does not disclose to any great extent the dynamic risk, the whole property statement sheet and its proper analysis and use can do much to check up on the effectiveness of this part of the risk.

THE GENERAL CONDITION OF THE TIMES

A man with a five-mile-an-hour boat can not hope to travel up a river by the power of his boat alone, if the current of that

river is even five and a small fraction miles an hour. Such an attempt would get the traveler nowhere, with pleasure, because the current would carry him against his will. The thing for such a man to do is to arrange his trip so as to go with the current and so augment rather than eliminate his speed.

By analogy no business man can direct the conduct of his affairs directly against the current of the economic stream without having at least the speed of the stream subtracted from the success speed of his enterprise. It may be that, because of an exceptionally strong static condition and dynamic character, he can drive his business ahead somewhat against mild economic disturbances but only at the cost of extra friction and unnecessary mental wear and tear. To adjust his affairs to the stress of the economic condition should be his aim and such an adjustment would benefit his position.

To use the geometric method *reductio ad absurdum* and imagine a ridiculous extreme, we make this point clearer to our observation. Let us suppose that some inventor discovered a chemical preparation that could be applied at little cost to the feet. Let us further presume that this would protect the feet more comfortably than shoes and that society should accept it as a proper mode. Being more comfortable and less expensive while still as stylish, it is not a far step to say that such a discovery would seriously jeopardize the boot and shoe and stocking business.

Now of course this supposition is most purely fanciful but not so extreme as it may seem. The power mill has put the spinning-wheel in the discard. The lover and his lass no longer ride behind old Dobbin and who can tell but that aeroplanes will eliminate the railroad trains for fast passenger service, even as *they* eliminated the stage-coach.

All this means that economic forces entirely outside the static or dynamic condition may materially affect the prosperity of any concern and in so doing directly add or subtract from its credit goodness.

THE PROPORTIONS OF THE RISKS

While it is largely a matter of opinion as to the relative values of the static, dynamic and condition elements of the risk the writer has formed the opinion that they should be figured as representing about forty, forty and twenty per cent. of the total judgment. If this be accepted as a reasonable division then the property statement in the mere disclosure of the static condition, if properly analyzed as will be later discussed, affects directly, in its asset and liability relationship, about forty per cent. of the total facts upon which the decision of credit extension rests.

While the statement itself is limited to the static information the statement sheet complete has a much larger range. Certain well-directed questions, and their proper analysis, will open up much of the ground under the dynamic risk and a deep analysis of the general statement will even enter into the condition of the times sphere, if analyzed under the type method, as will be carefully explained in the chapter on Type Analysis.

We come then to the point where we ought to consider the construction of the statement form to be supplied to prospective customers so that it may be complete enough to gather the necessary data for a complete analysis.

THE STATEMENT

There are a number of things which the statement form should contain although some credit men can get along with less

information than others. There are certainly several items that may appear unimportant that should always be called for by the creditor.

The first of these is an accurate description of the name, kind of business and the definite street address. The question of getting these three items accurately is important because there have been many instances of approximate names and addresses used by crooks so as to pose as reputable houses and secure shipments of merchandise unworthily. Incidentally this accuracy of description is most important for use in checking up through the banks, as it is almost impossible for them to give you good information without this accurate location.

The next matter of importance is the statement of assets and liabilities in detail. Generally these are shown in balanced form although here and there we find a credit man who has had better luck with a more skeletonized form. Perhaps in some instances the more or less interrogative statement produces better results in that it does not seem as formidable to the debtor and therefore is sometimes more likely to be filled out.

Supplemental to the statement of the assets and liabilities there are certain essential operating facts that should be set forth plainly. The most important of these operating facts is the volume of sales, because, without this, it is almost impossible to determine the over or under inventoried condition of the risk as will later be discussed in the chapter on Internal Analysis. Next to the sales the most important matter is a clear and concise statement as to the presence of any contingent liabilities due to rediscounted notes receivable, hypothecated receivables of any shape, accommodation endorsements, etc. In seeking information on this point it should be insisted that the debtor commit himself to a very definite statement concerning the conditions so that in

case of a failure this matter is definitely for or against him in the courts.

SPECIMENS OF STATEMENTS

The following forms are samples of statements forms that display to good advantage the several points mentioned and which can be adapted to the needs of almost any situation. Personally the writer believes in a little further division of the inventory item so that it would read

Merchandise. Finished (at cost)
Merchandise in Process (at cost)
Merchandise, Raw Materials (at cost)

It might also be well to secure information, especially in a market of falling prices, as to the market price both at the time of purchase and at the statement time of the merchandise on hand. Even if this is only an estimated valuation it would be of material advantage in sizing up the condition.

If the reader wishes to get into the study of more detailed statements, such as issued by banks for their customers, they can find a greater selection of specimens in the writer's book *The Banker's Credit Manual.* The statements are more detailed in their questionings because the banker generally has the opportunity of sitting in with his client and talking it over with him or even seeing the actual books for verification. Because of the difference in the relationship these banker statements are not introduced here, but their study is very suggestive.

THROUGH THE MAIL

In receiving a statement the credit man should bear in mind the fact that the government looks very much askance on the person who uses the United States mail as a means of carrying

FINANCIAL AND BUSINESS STATEMENT

SUBMITTED TO

ALBERT MACKIE COMPANY, LTD.

CREDIT DEPARTMENT

(Please Fill in as Fully as Possible)

Firm Name ....

Town and State ....

Kind of Business .... Year established ....

Merchandise on hand (cost value), $ .... Amount of Insurance on same, $ ....

Real estate (cost value), $ .... Amount of Insurance on same, $ ....

Location of real estate ....

Mortgage on real estate ....

Furniture and fixtures .... Amount of Insurance on same, $ ....

Live stock, vehicles and autos .... Amount of Insurance on same, $ ....

Bonds and Stocks ....

....

Other assets, consisting of ....

....

Cash on hand and in bank ....

Name of my bank or banker ....

Amount of life insurance carried, $ .... Name of company ....

Annual sales .... Monthly rental ....

Amount owing for merchandise, $ .... Amount owing to banks, $ ....

Amount owing to others, $ ....

Age .... Married or single .... Nationality ....

Commercial record ....

References ....

Remarks ....

Date .... Signed ....

It is understood and agreed that the above statement is rendered as a basis for the extension of credit, and is a fair valuation of my assets and liabilities, and that same is strictly confidential, and for use in your files.

Size of original 7⅝ x 9⅝

RETURN REPLY TO OFFICE INDICATED BY ENCLOSED ADDRESSED ENVELOPE.

FINANCIAL STATEMENT

Register No. 6

Report No. 455149

Date ________________ 190__

Firm Name ________________

Address ________________

What business engaged in? ________________ Ever fail, if so, how settled? ________________

How long in business? ________________ Is business prosperous? ________________

Amount of Annual Sales? $ ________________ Do you pay bills promptly? ________________

Amount of insurance $ ________________ On what? ________________

What Bank doing business with? ________________

ASSETS

	Dollars	Cents
Merchandise on hand, cash value		
Amount of accounts and notes considered good		
Amount of Cash on hand and in Bank		
Real Estate consisting of		
Any other assets, if so, what		
Total Assets.		

LIABILITIES

	Dollars	Cents
Amount owing for merchandise on open accounts		
(How much of above is past due? $ ______)		
Amount owing for borrowed money, to whom		
Amount Incumbrance on Real Estate		
Any other indebtedness, if so what?		
Total Liabilities		
NET WORTH		

Our Liabilities are distributed with the following-named firms: Amount Owing

NAME	ADDRESS	Dollars	Cents

Full names of Partners? ________________

The above is a full and correct statement of my (or our) financial condition.

Correct Firm Name ________________

Answer ALL Questions. Signed by ________________

Size of original 7 x 10½

FINANCIAL STATEMENT

Town .... Date ....

.... (I or we) give you below a statement of .... (my or our) financial condition as nearly as .... (I or we) can estimate it on .... (date).

ASSETS

Cash in Bank		
Cash on hand		
Value of stock in store		
Value of stock in transit		
Amount of book accounts considered good		
Amount of notes considered good		
QUICK ASSETS (footing of above)		
Amount of accounts and notes of questionable value		
Value of Manufacturing Plants, Machinery, Tools, etc		
Value of Office and Store Fixtures		
Horses, Wagons, etc		
Other Assets		
TOTAL		

LIABILITIES

Owe for Merchandise on open account, not due		
Owe for Merchandise on open account, past due		
Owe for Merchandise closed by note, not due		
Owe for Merchandise closed by note, past due		
Borrowed Money		
All other obligations		

TOTAL .... $ ....

SURPLUS IN BUSINESS ....

Houses, land, etc. .... $ ....

Mortgages or amounts unpaid thereon ....

Equity in Real Estate ....

Personal property .... TOTAL ....

NET WORTH ....

Indorser on Commercial paper discounted and proceeds used in business .... $ ....

Indorser on other paper outside of business or otherwise liable for other debts ....

TOTAL CONTINGENT LIABILITY (Footing of above two items) ....

Chattel Mortgage on merchandise, machinery, tools, fixtures or teams, ... $ ....

Stock and Fixtures insured for ....

Buildings, etc., insured for ....

References ....

....

....

....

Signature ....

....

(1003) 1M 2-19

Size of original 6⅝ x 10½

_______________ 191___

TOWN COUNTY STATE DATE

For the purpose of obtaining credit or an extension of time on an account or notes due with the Ellsworth & Thayer Manufacturing Company, of Milwaukee, Wis., or for goods which we I may now or hereafter purchase from them, do make the following statement and representation of our my true present financial circumstances and mercantile responsibility.

NAME OF FIRM..

Name of partners..

....

....

Date of Inventory..

ASSETS	DOLLARS	CENTS	LIABILITIES	DOLLARS	CENTS
Stock on hand, at present cash value			For merchandise not due		
Notes good			For merchandise past due		
Accounts good			For borrowed money		
Notes and Accounts doubtful			State time, interest, to whom, whether		
Cash on hand and in bank			secured and if so, how?		
Fixtures					
Personal property { Grain			Individual Liabilities		
Personal property { Cattle			Confidential Liabilities		
Other personal property			Owing wife or other relatives or friends		
Cash value of Real Estate			Chattel mortgages		
in..........'s name			Upon what		
Description			To whom		
			When due		
			Incumbrance on Real Estate		
Total Assets,			**Total Liabilities,**		

Annual business $..

Insurance on Stock $..

Insurance on Real Estate $..

Other Insurance $..

REFERENCES:

....

....

....

....

....

....

Signature of firm..

By..

....

....

ALL PRINTED LINES HEREON MUST BE FILLED IN.

Size of original 6⅞ x 10½

PROPERTY STATEMENT

TO

> "Large assets are not always necessary to the creation of credit; what is most desirable is, that credit be in relative proportion to the actual assets."

> "The giver of credit is a contributor of capital, and becomes, in a certain sense, a partner of the debtor, and, as such, has a natural right to complete information of the debtor's condition at all times."

Form Adopted and Recommended by the National Association of Credit Men

For the purpose of obtaining merchandise from you on credit, I (we) make the following statement in writing, intending that you should rely thereon respecting my (our) financial condition as of (Date)______________ 19___

(All questions should be answered. When no figures are inserted, write word "None.")

ASSETS			LIABILITIES		
Cash in hand			For MERCHANDISE:		
Cash in bank			Accounts owing not due		
Accounts owing by customers, good and collectible, not pledged or sold			Accounts owing past due		
			Trade Acceptances payable		
Notes owing by customers, good and collectible, not pledged or sold			Notes payable for Mdse.		
			For BORROWED MONEY:		
Trade Acceptances receivable, not pledged or sold			Notes payable to banks		
			Notes or debts payable to others (including relatives and friends)		
Merchandise: (not on consignment or conditional sale.) (How valued; Cost____ Market____)			Deposits of money with us. (Describe)		
Other quick assets:			Owing for Wages and Salaries		
(Describe)			Owing for Taxes (city, state and federal)		
			Owing for Rental		
			Owing for Insurance Premiums		
TOTAL QUICK ASSETS			TOTAL QUICK LIABILITIES		
Machinery: (How valued; Cost____ Depreciated____)			Debt secured by mortgage on land or buildings		
Fixtures and other Equipment. (How valued; Cost____ Depreciated____)			Debt secured by chattel mortgage or other liens		
Land and Buildings as described below			Debt secured by judgment		
			Other liabilities:		
Notes and Accounts owing from members of firm, employees, or others not customers			(Describe)		
Other assets:			TOTAL LIABILITIES		
(Describe)			NET WORTH — *Capital Stock: Preferred		
			NET WORTH — *Capital Stock: Common		
			NET WORTH — Surplus and Undivided Profits		
TOTAL ASSETS			TOTAL		

What books of account do you keep? ______

Was this statement made from those books? ______ Do you keep cost records? ______

Do you sell or pledge your accounts to creditors, banks, finance companies or others? ______. If so, what amount is so sold or pledged? $______ What amount of your accounts have you sold or pledged during the past twelve months? $______

Are any creditors secured by mortgage or lien of any sort? ______ If so, how? ______

Are any claims in attorneys' hands or suits against you? ______

Have you merchandise on consignment or conditional sale? ______. If so what amount? $______

If business property is leased, for what term and what rental? ______

Name and locality of your bank or banks ______

Location and kind of business ______

Is your business incorporated? ______ If so, under laws of what state? ______

Previous business experience ______ Where ______

It is important that every question on both sides of this sheet be correctly answered and that the blanks be carefully filled in. In answering questions involving amounts write the word "none" where figures do not apply. You will find it advantageous to keep a copy of this statement for comparison with the showing you will be able to make a year hence.

***Capital stock item to be filled out only by corporations.**

Size of original 7¼ x 10½

INSURANCE

On Merchandise $________ On Buildings $________ Machinery $________ Fixtures $________

Other Equipment $________ Employers' liability $________

Is any insurance assigned?______ What amount?______ To whom?________

Amount of life insurance for benefit of business $________

With what companies________

SUMMARY OF PROFIT AND LOSS

Inventory of Mdse. beginning of fiscal year (not including fixtures or equipment)			Sales last fiscal year		
Cost of Mdse. purchased during the year			Income from all other sources		
General expenses including salaries, losses, etc.			Inventory of Mdse. at close of year		
TOTAL EXPENSES			Total Income for year		
			Less Total Expenses		
			NET PROFIT FOR YEAR		

RECORD OF LAND AND BUILDINGS

Title in name of	Description and location	Book value	Assessed value	Amount of Encumbrances	To whom

BUY PRINCIPALLY FROM THE FOLLOWING CONCERNS

Names	Addresses	Amount Owing			
		Open Account		Notes	

Names and Addresses of Partners, or if Corporation, of Officers________

REMARKS:

The foregoing statement has been carefully read (both printed and written matter) and is in all respects complete, accurate and truthful. It discloses to you the true state of my (our) financial condition on the date above stated. Since that time there has been no material unfavorable change in my (our) financial condition; and if any such change takes place I (we) will give you notice. Until such notice is given, you are to regard this as a continuing statement.

Name of Individual, Firm or Corporation________

Signed by________

Street________ Town________ State________

Date of signing statement________ 19___

Form Jt.

Size of original 7¼ x 10½

> "Large assets are not always necessary to the creation of credit; what is most desirable is, that credit be in relative proportion to the actual assets."

PROPERTY STATEMENT

TO

> "The giver of credit is a contributor of capital, and becomes, in a certain sense, a partner of the debtor, and, as such, has a natural right to complete information of the debtor's condition at all times."

Form Adopted and Recommended by the National Association of Credit Men

For the purpose of obtaining merchandise from you on credit, we (I) make the following statement in writing, intending that you should rely thereon respecting our (my) financial condition as of (Date)____________________19____

(All questions should be answered. When no figures are inserted, write word "None.")

ASSETS			LIABILITIES		
Cash in hand ________			For MERCHANDISE:		
Cash in bank ________			Accounts owing not due ________		
Accounts owing by customers, good and collectible, not pledged or sold ________			Accounts owing past due ________		
Notes owing by customers, good and collectible, not pledged or sold ________			Trade Acceptances payable ________		
Trade Acceptances receivable, not pledged or sold ________			Notes payable for Mdse. ________		
Merchandise: (not on consignment or conditional sale.) (How valued; Cost____ Market____) ________			For BORROWED MONEY:		
Other quick assets			Notes payable to banks ________		
(Describe) ________			Notes or debts payable to others (including relatives and friends) ________		
________			Deposits of money with us. (Describe)		
________			________		
			Owing for Wages and Salaries ________		
			Owing for Taxes (city, state and federal) ________		
			Owing for Rental ________		
			Owing for Insurance Premiums ________		
TOTAL QUICK ASSETS			TOTAL QUICK LIABILITIES		
________			________		
Machinery. (How valued; Cost____ Depreciated____) ________			Debt secured by mortgage on land or buildings ________		
Fixtures and other Equipment. (How valued; Cost____ Depreciated____)			Debt secured by chattel mortgage or other liens ________		
Land and Buildings as described below ____			Debt secured by judgment ________		
________			Other liabilities:		
Notes and Accounts owing from officers, employees, or others not customers ____			(Describe) ________		
Other assets.			________		
(Describe) ________			________		
________			________		
			TOTAL LIABILITIES		
________			NET WORTH ________		
TOTAL ASSETS			TOTAL		

What books of account do you keep? ____________________

Was this statement made from those books? __________ Do you keep cost records? __________

Do you sell or pledge your accounts to creditors, banks, finance companies or others? ________. If so, what amount is so sold or pledged? $________ What amount of your accounts have you sold or pledged during the past twelve months? $________

Are any creditors secured by mortgage or lien of any sort? ________ If so, how? ________

Are any claims in attorneys' hands or suits against you? ____________________

Have you merchandise on consignment or conditional sale? ________. If so, what amount? $________

If business property is leased, for what term and what rental? ____________________

Name and locality of your bank or banks ____________________

Location and kind of business ____________________

Previous business experience __________ Where __________

It is important that every question on both sides of this sheet be correctly answered and that the blanks be carefully filled in. In answering questions involving amounts write the word "none" where figures do not apply. You will find it advantageous to keep a copy of this statement for comparison with the showing you will be able to make a year hence.

Size of original 7¼ x 10½

INSURANCE

On Merchandise $ ________ On Buildings $ ________ Machinery $ ________ Fixtures $ ________

Other Equipment $ ________ Employers' liability $ ________

Is any insurance assigned? ________ What amount? ________ To whom? ________

Amount of life insurance for benefit of business $ ________

With what companies ________

SUMMARY OF PROFIT AND LOSS

Inventory of Mdse. beginning of fiscal year (not including fixtures or equipment)			Sales last fiscal year		
			Income from all other sources		
Cost of Mdse. purchased during the year			Inventory of Mdse. at close of year		
General expenses including salaries, losses, etc.			Total Income for year		
			Less Total Expenses		
TOTAL EXPENSES			NET PROFIT FOR YEAR		

RECORD OF LAND AND BUILDINGS

Title in name of	Description and location	Book value	Assessed value	Amount of Encumbrances	To whom

BUY PRINCIPALLY FROM THE FOLLOWING CONCERNS

Names	Addresses	Amount Owing			
		Open Account		Notes	

Names and Addresses of Owners of Business ________

REMARKS:

The foregoing statement has been carefully read (both printed and written matter) and is in all respects complete, accurate and truthful. It discloses to you the true state of our (my) financial condition on the date above stated. Since that time there has been no material unfavorable change in our (my) financial condition; and if any such change takes place we (I) will give you notice. Until such notice is given, you are to regard this as a continuing statement.

Firm Name ________

Signed by ________

Street ________ Town ________ State ________

Date of signing statement ________ 19__

Form B.

Size of original 7¼ x 10½

Cr. 1-10M-12-20

FEDERAL RESERVE BANK OF NEW YORK STATEMENT FORM.

INDIVIDUAL

STATEMENT OF .... MERCHANT, MANUFACTURER, ETC.

BUSINESS .... ADDRESS ....

TO .... BANK OF ....

I MAKE THE FOLLOWING STATEMENT OF ALL MY ASSETS AND LIABILITIES AT THE CLOSE OF BUSINESS ON .... AND GIVE OTHER MATERIAL INFORMATION FOR THE PURPOSE OF OBTAINING ADVANCES ON NOTES AND BILLS BEARING MY SIGNATURE OR ENDORSEMENT, AND FOR OBTAINING CREDIT GENERALLY UPON PRESENT AND FUTURE APPLICATIONS.

(PLEASE ANSWER ALL QUESTIONS AND FILL IN ALL BLANKS)

ASSETS					LIABILITIES				
Cash on Hand and in Bank					Accounts Payable				
Accounts Receivable					Notes Payable to Bank				
Notes Receivable					Notes Payable to Others				
Merchandise					Other Current Liabilities (Itemize)				
Other Quick Assets (Itemize)									
QUICK ASSETS					CURRENT LIABILITIES				
Land and Buildings (See Schedule on Back)					Mortgages				
Machinery and Fixtures					Other Liabilities (Itemize)				
Other Assets (Itemize)									
					CURRENT AND DEFERRED LIABILITIES				
					Net Worth				
TOTAL					TOTAL				

MERCHANDISE. ON WHAT BASIS VALUED, COST OR MARKET? ....
FINISHED $ .... UNFINISHED $ ....
RAW $ .... IF ANY GOODS ON CONSIGNMENT, STATE AMOUNT AND CIRCUMSTANCES ....
....
DO YOU TAKE ADVANTAGE OF ALL TRADE DISCOUNTS? ....

SALES AND PROFITS LAST FISCAL YEAR. NET SALES $ ....
NET PROFITS $ ....

ACCOUNTS AND NOTES RECEIVABLE. STATE AMOUNTS AND CIRCUMSTANCES: (A) IF ANY ARE PAST DUE OR DOUBTFUL ....
....
(B) IF ANY ARE PLEDGED ....
....
(C) IF ANY ARE DUE FROM EMPLOYEES, RELATIVES OR SIMILAR SOURCES
....
....

BONDS AND STOCKS. STATE GENERAL CHARACTER AND IF READILY SALABLE AT VALUES STATED ....

INSURANCE. FIRE, ON BUILDING $ .... MERCHANDISE $ ....
LIFE $ .... WHO IS BENEFICIARY? ....

CONTINGENT LIABILITY. AS INDORSER $ .... AS GUARANTOR $ .... NO ACCOUNTS OR NOTES RECEIVABLE HAVE BEEN SOLD, DISCOUNTED OR ASSIGNED WITH MY ENDORSEMENT OR GUARANTEE EXCEPT AS FOLLOWS: ....
....

ACCOUNTS AND NOTES PAYABLE. IF ANY ARE PAST DUE STATE AMOUNT AND CIRCUMSTANCES ....
....

CURRENT LIABILITIES. DURING LAST FISCAL YEAR, CURRENT LIABILITIES WERE AT A MAXIMUM ($ ....) ON ....
AND AT A MINIMUM ($ ....) ON ....

MORTGAGES AND OTHER LIENS. STATE DUE DATE OF MORTGAGES AND ON WHAT ASSETS A LIEN ....
....
.... IS MORTGAGE A LIEN ON ANY CURRENT ASSETS? ....
IF ANY OTHER LIENS ON ASSETS, STATE AMOUNT AND CIRCUMSTANCES ....
....

AGE. MY AGE IS .... DATE STARTED PRESENT BUSINESS ....

AUDITS. Are BOOKS AUDITED by a CERTIFIED PUBLIC ACCOUNTANT? ....
GIVE DATE OF LAST AUDIT ....

I HEREBY CERTIFY THAT THE FOREGOING FIGURES ARE TAKEN FROM MY BOOKS AND THAT THEY AND THE STATEMENTS CONTAINED ON BOTH SIDES OF THIS SHEET ARE TRUE AND GIVE A CORRECT SHOWING OF MY FINANCIAL CONDITION.

SIGNED THIS .... DAY OF .... 19 .... NAME ....
PROPRIETOR

(OVER)

Size of original 7½ x 10¼

LOCATION OF LAND OWNED	ACRES	ESTIMATED VALUE	ASSESSED AT	MTGD. FOR	INSURED FOR

TITLE. THE LEGAL AND EQUITABLE TITLE TO ALL PIECES OF ABOVE DESCRIBED REAL ESTATE IN MY NAME SOLELY, EXCEPT AS FOLLOWS: ....

(THE BALANCE OF THIS SPACE MAY BE USED FOR PRINTING ANY QUESTIONS DESIRED TO BE ASKED AMPLIFYING STATEMENT OF CONDITION AS SHOWN ON THE OPPOSITE PAGE.)

Size of original 7½ x 10¼

CR-4

Federal Reserve Bank of New York Statement Form
INDIVIDUAL
FARMER OR LIVE STOCK DEALER.

STATEMENT OF..

BUSINESS..ADDRESS..

TO..BANK OF..

I make the following statement of all my assets and liabilities as at the close of business on.................................. and give other material information for the purpose of obtaining advances on notes and bills bearing my signature or indorsement and for obtaining credit generally upon present and future applications.

(PLEASE ANSWER ALL QUESTIONS AND FILL IN ALL BLANKS)

ASSETS				LIABILITIES			
Cash on hand and in bank..................				Accounts owed by me..................			
Accounts due to me—Good..................				Notes owed by me without security..................			
Unsecured loans due to me—Good..................				Notes owed by me with security other than real estate..................			
Secured loans due to me..................				Notes or mortgages owed by me with real estate as security..................			
Mortgage loans due to me..................							
Farm products on hand..................				Notes owed by me with chattel mortgage as security..................			
Live stock on hand..................							
Farm land (See schedule)..................				Other indebtedness (Itemize)..................			
Buildings..................				....			
Farm implements and machinery..................				....			
Other property (Itemize)..................				....			
....				Total Liabilities..................			
....				Net Worth..................			
TOTAL				TOTAL			

Location of Land Owned	Acres	Estimated Value	Assessed at	Mtgd. for	Insured for

Title. The legal and equitable title to all pieces of above described real estate is in my name solely, except as follows:..

....

....

Buildings. State general character..

....Ever destroyed by fire?..........

Implements. State general character of those listed as assets..........

....

Growing Crops. Outlay to date is as follows:

Cost of seed..............................$..................

" " fertilizer..............................$..................

" " labor..............................$..................

Other costs—(Itemize)..............................$..................

Total..............................$..................

Insurance. Fire $..................Life $..................

Who is beneficiary?..

Contingent Liability. As indorser $..

As guarantor $..................As bondsman for others $..................

Accounts and Notes Payable. If any are past due state amounts and reasons..

....

Maximum Debt. During last calendar year, my total indebtedness was at a maximum ($..................) on..................and at a minimum ($..................) on..................

Other Liens. If any other liens on assets, state am't and circumstances

....

....

Age. My Age is..................Married or Single..................

I hereby certify that the figures and statements contained on both sides of this sheet are true and give a correct showing of my financial condition.

Signed this..........day of..................191.... Name..

(OVER)

Size of original 7½ x 10½

State character of Accounts, Notes and Mortgages listed as assets..

....

....

....

If any leased land used, state acreage, nature, use and terms of rental...

....

(The balance of this space may be used for printing any questions desired to be asked amplifying statement of condition as shown on opposite page.)

Size of original $7\frac{1}{2}$ x $10\frac{1}{2}$

CR-9-14M-3-20

Federal Reserve Bank of New York Statement Form

FIRM

STATEMENT OF..

BUSINESS.................................ADDRESS.................................

TO.................................BANK OF.................................

We make the following statement of all the assets and liabilities of our firm at the close of business on.................................
and give other material information for the purpose of obtaining advances on notes and bills bearing our signature or indorsement, and for obtaining credit generally on present and future applications.

(PLEASE ANSWER ALL QUESTIONS AND FILL IN ALL BLANKS)

ASSETS					LIABILITIES				
Cash on Hand and in Banks.............					Accounts Payable....................				
Accounts Receivable....................					Notes Payable to Banks................				
Notes Receivable........................					Notes Payable to Others................				
Merchandise............................					Deposits..............................				
Other Quick Assets (Itemize)............					Other Current Liabilities (Itemize)........				
....					....				
....					....				
....					....				
Quick Assets					**Current Liabilities**				
Land and Buildings.....................					Mortgages..............................				
Machinery and Fixtures..................					Other Deferred Liabilities (Itemize).......				
Other Assets (Itemize)..................					....				
....					**Current and Deferred Liabilities**				
....					Net Worth..............................				
TOTAL					TOTAL				

Merchandise. On what basis valued, cost or market..........

Finished $........Unfinished $............ Raw $............

If any goods are on consignment, state amount and circumstances.....

....

....

....

Sales and Profits Last Fiscal Year. Net sales $...............

Net profits $..

Accounts and Notes Receivable. State amount and circumstances

(a) If any past due or doubtful...

(b) If any are pledged..

(c) If any amounts are due from members of the firm, employees, branches or similar sources...

....

Bonds and Stocks. State general character and if readily salable at value stated..

....

Insurance. Fire, on Buildings $....................Merchandise $..................Life, in favor of firm $..................

Contingent Liability. As indorser $..................................

As guarantor $....................No accounts or notes receivable have been sold, discounted or assigned with our indorsement or guarantee except as follows:...

....

Accounts and Notes Payable. If any are past due state amount and circumstances...

....

During last fiscal year current liabilities were at maximum ($...............) on....................and at a minimum ($..................) on..................

Mortgages and Other Liens. State due date of mortgages and on what assets a lien..

...........Is mortgage a lien on any current assets? ....

If any other liens on assets, state amount and circumstances...........

....

Reserves and Depreciation. State what provision is made..........

....

....

We hereby certify that the foregoing figures are taken from the books of our firm and that they and the statements contained on both sides of this sheet are true and give a correct showing of our financial condition.

Signed this..........day of....................192.... Firm Name..

(OVER)

By..
Member of Firm

Size of original 7½ x 10½

DATE OF PARTNERSHIP..DATE OF EXPIRATION..

General Partners			Special Partners		
Name	Amount Contributed	Net Worth Outside this Business	Name	Amount Contributed	Partner Until
....	....	....	....	....	....
....	....	....	....	....	....
....	....	....	....	....	....

If the firm has any branch offices state location and how accounts are handled..............................

....

....

If the firm or any member is connected with any other business, state nature of the business and extent to which interested..................

....

....

What is the practice of the firm in regard to trade discounts?..

....

....

Are books audited by a certified public accountant?................Give date of last audit..

Location and Description of Land Owned	Estimated Value	Assessed at	Mtgd. for	Insured for
....	....	....	....	....
....	....	....	....	....
....	....	....	....	....
....	....	....	....	....
....	....	....	....	....
....	....	....	....	....
....	....	....	....	....

Title. The legal and equitable title to all pieces of above described real estate is solely in the name or names of one or more of the members of the firm, except as follows:..

....

(The balance of this space may be used for printing any questions desired to be asked amplifying statement of condition as shown on opposite page).

Size of original 7½ x 10½

CR. 7-21M-7-20

Federal Reserve Bank of New York Statement Form.
CORPORATION.

STATEMENT OF..

BUSINESS..ADDRESS...

TO...BANK OF...

We make the following statement of all the assets and liabilities of this company at the close of business on.............................. and give other material information for the purpose of obtaining advances on notes and bills bearing our signature or indorsement, and for obtaining credit generally on present and future applications.

(PLEASE ANSWER ALL QUESTIONS AND FILL IN ALL BLANKS.)

ASSETS		LIABILITIES	
Cash on Hand and in Banks		Accounts Payable	
Accounts Receivable		Notes Payable to Banks	
Notes Receivable		Notes Payable to Others	
Merchandise		Deposits	
Other Quick Assets (Itemize)		Other Current Liabilities (Itemize)	
Quick Assets		Current Liabilities	
Land and Buildings		Mortgages	
Machinery and Fixtures		Bonded Debt	
Other Assets (Itemize)		Other Liabilities (Itemize)	
		Current and Deferred Liabilities	
		Capital Stock Preferred	
		Capital Stock Common	
		Surplus and Undivided Profits	
TOTAL		TOTAL	

Merchandise. On what basis valued, cost or market?..............

Finished $............Unfinished $.............Raw $............

If any goods are on consignment, state amount and circumstances..

....

....

Sales and Profits Last Fiscal Year. Net sales $.................

Net profits $.................Dividends paid $..................

Accounts and Notes Receivable. State amount and circumstances

(a) If any are past due or doubtful...............................

....

(b) If any are pledged..

(c) If any amounts are due from directors, officers, employees, subsidiaries, branches, or similar sources.............................

....

....

Bonds and Stocks. State general character and whether readily salable at value stated...

....

Insurance. Fire, on Buildings $............................ Merchandise $...............Life, in favor of company $..............

Contingent Liability. As indorser $............................

As guarantor $..................... No accounts or notes receivable have been sold, discounted or assigned with our indorsement or guarantee except as follows:......................................

....

Accounts and Notes Payable. If any are past due state amount and circumstances..

....

During last fiscal year current liabilities were at a maximum ($...................) on.......................................

and at a minimum ($................) on.......................

Mortgages and Bonds. State due dates of mortgages and on what assets a lien...

....

State due date of bonds and on what assets a lien....................

....

........Are mortgages or bonds a lien on any current assets?........

If any other liens on assets, state amount and circumstances..........

....

Reserves and Depreciation. State what provision is made.........

....

We hereby certify that the foregoing figures are taken from the books of this company and that they and the statements contained on both sides of this sheet are true and give a correct showing of the financial condition of the company.

Signed this..........day of.....................192.... Name...

By...
(State official title)

(OVER)

Size of original 7½ x 10½

OFFICERS		DIRECTORS	
	President		
	Vice-Pres.		
	Treas.		
	Secretary		

In what state incorporated? ....

If company has any subsidiaries or branch offices state location and how accounts are handled..............................

....

....

What is practice of company in regard to trade discounts? ....

....

....

Are books audited by a certified public accountant? ....Give date of last audit..............................

(The balance of this space may be used for printing any questions desired to be asked amplifying statement of condition as shown on opposite page.)

Size of original 7½ x 10½

documents which have as their intent the defrauding of any one. To take advantage of this condition the credit man should protect himself by setting up a practise in the receipt of statements that come by mail. The easiest way to do this is to have a special envelope, self-addressed, for the customer to use in sending in the statement. This envelope should be clearly marked "Not to be opened except by the Credit Department." This marking should be both on the front and the back so that a mailing department can not easily overlook it. The return envelope should be characteristic and striking. In his own work the writer achieved this noticeability by having a broad, one-eighth inch, bright green line run across both back and front about one and one-quarter of an inch down from the top of the envelope. This marking singled out letters meant for the credit department from the general mail.

Upon opening such an envelope, having in it a statement, the person opening should slit the envelope on three sides so that it will lay flat and should then enter on it the phrase:

"This envelope received ...... day of ..... 19.. contained the statement of .... for ....date.

signed ...."

The opened envelope should then be permanently fastened by pasting or glueing to the statement itself. If this is established as a uniform practise it would be possible to introduce this combined exhibit as good evidence in a case of fraud.

CHAPTER VII

Comparative Statement Analysis

Property statements have come to play a serious and important part in the credit decision. They represent the static condition of the risk in that they reflect the condition achieved by the operations of the subject. The accumulation of assets and liabilities and the margin between indicates what of this world's goods and responsibilities have been acquired. Consequently the analysis of this condition is of really prime importance. It is not enough to secure a property statement from a risk and read it as one would read the Sunday morning paper. It is not enough to read a few of the head-lines, take a glance at the market or the sporting page and throw it aside as something finished. Too many property statements are read and neither studied, analyzed nor properly recorded. That the property statement contains good information is so true that to say it seems almost trite. But the unused, unanalyzed features of the statement often contain more than is casually discovered in the ordinary reading. This can lead to but one sound conclusion, and that is that analysis is worth while and that this analysis should be real, fundamental and not of a superficial character.

Whether the risk is making progress or not is perhaps the main thing being hunted for when we attempt to make an analysis. Progress upward, measuring the success of the venture in its effort to make money and prosper, can only be indicated by a comparison with some past condition. This means that we

should have some record, as between property statements of varying dates, so as to be able to compare accurately and quickly the essential items making up such property statement. If such a comparative record is not made and kept sacredly up to date then the analyst has only two other methods open to him. The first of these is to rely on memory to retain the record of the former statement and his impressions of it and the other is to read both statements, the present and the past, whenever a new statement is presented for analysis as the basis of a new or continued credit extension. The first of these methods is open to the danger of lapse of memory and the false retention of impressions. The second is cumbersome and slow. This simple lack of speed is contrary to the temperament of the average American executive and in time of stress presents an almost impassable obstacle to a true reading. The necessity for a double analysis in the time that should be allotted to one tends to create a tendency to slight the job of real analysis and resort to the memory method to cut corners and save time. Therefore it seems to be only common sense to create the comparative record, even if at some cost of money and effort. As a matter of office practise the preliminary compilations of the record in comparison form can very easily be prepared by a junior and put in such shape that the main credit executive can be saved much time and trouble and relieved from the strain of detail.

The common practise in establishing a comparative record for analysis is to use the columnar form so that succeeding statements may be set side by side thereby indicating more clearly their variations. The dates of the succeeding statements should be set at the top of each column so that the lapse of time may readily be noticed. There should be a listing of the main items that go to make up a property statement, starting with cash and

ending with the general items of prepaid accounts for insurance, etc., that generally are inserted as a part of the assets. The liabilities should be listed below the assets and at the bottom of both assets and liabilities there should be a place to foot and total the statement. The insertion of this total should not be a perfunctory matter of putting down the total as it appears on the property statement itself but should be an actual manual, or machine footing. This serves two purposes. First it checks up, if it agrees, the figures on the balance sheet, and second it checks up the transcription of the figures to the comparison record. This may seem an insignificant matter, but the writer has seen so many instances in which the figures on the property statement did not balance or foot that to him it seems absolutely essential that actual footing be used to prove the correctness of the figures. These discrepancies have been found not only on the statement of the smaller concern that compiles and presents its own statement but in the figures of larger companies and in several instances even in statements presented on the stationery and over the signature of high priced, supposedly extremely accurate public accountants. Of course these discrepancies have been laid to clerical copyist and childish errors, but if the figures had been taken as such without proving they might, in some instances, have resulted in a very different attitude toward the risk involved in the credit extension.

It is not enough, however, to set the figures side by side even if done in detail. There are several different kinds of assets and liabilities, varying in their ability to liquidate and thereby put the subject in funds and in contra having various degrees of claim against the subject. These variations in characteristics make it essential, in order to compare like with like, that items of similar liquidating character be grouped in some way together so that

the total of any kind, of either asset or liability, may be plainly and definitely known and indicated.

The first such type of asset to be considered is the current asset. In this class come all assets of a readily liquidating character. These are the assets that in the normal condition of affairs will run their course and turn into cash with which to defray debts in a reasonably short period of time, and in abnormal stress or in liquidation will work out with the highest percentage of value, as compared to the amount carried on the books, so as to show the least shrinkage. These use up in their liquidation through shrinkage the smallest proportional part of the net worth, which is the shock absorber between assets and debts. These items include the cash on hand, notes and accounts receivable, merchandise in all its stages, both raw material and finished and semi-finished goods. In this class can legitimately be included the equity in government bonds and such other bonds or securities as are given in detail and as are listed on some active market where they could be readily sold at any time.

These items, subdivided as consistently as may be, should be the first items listed on our comparison sheet. Following the lines assigned to these actual items it is good practise to allow two or three lines for the insertion, by hand, of special items from time to time that the varying personal accounting methods of different risks may present that are current in their nature. The presence of these extra lines adds flexibility to the form.

Following the actual current assets and the extra lines a special line should be allowed for a sub-total to include in its footing all the current assets. It is well to segregate this footing from the body of the figures by having a footing line and by indenting the nomenclature of the item. In actual practise the writer has had his form ruled so that this footing line appeared

in green and the sub-total, or footing of the current assets, was entered on the form in green so as to make it prominently distinguishable from the other figures and clearly differentiate it from a statement item, thereby avoiding confusion.

The second type of assets are those that do not liquidate so rapidly and in a final liquidation do not realize so much on the dollar of the book value as do the current assets, as a usual thing. These are variously called "slow assets," "non-current assets," "capital assets," "fixed assets." The nomenclature is a matter of choice as all the names mean practically the same thing and indicate the degree of rapidity of liquidation. Among these items we find machinery, fixtures, real estate, buildings, prepaid items such as prepaid insurance, prepaid rents, etc., stocks and bonds that have no readily obtainable market value and such other items as are not of a readily liquidating nature.

All of these items bear a direct relation to the capital investment and should be segregated so that their total can easily be observed. An easy way to do this is to adopt the same method that was explained in relation to the current assets and have the form so made up as to have a line for sub-footing, preferably of a distinctive color, two or three lines below the last printed item so that the non-current items may be totaled. It is well to make the total of a distinguishing color so that it will stand out as something special and not be easily confused with the real statement items. The writer used in this a green ink as he did in the sub-footing of the current assets.

The total of the current and the non-current assets when added will equal the total footings of the statement, unless the practise has been followed of eliminating the items of treasury stock, good will, etc., when the footing will be less by these amounts, on such statements as carry these items in the assets.

Of course there may be some argument as to the disposition of a good-will item because it may have a very real value, but there can be no argument as to the treasury stock item which is only a book entry and of no value in a liquidation. Treasury stock should be subtracted from the total capital and this figured as a net amount when computing the net worth. This may be done and the item eliminated from the assets or it may be done in a separate computation when handling the net worth on the liability side of the statement. The main thing is to adopt some method and make all computations on a uniform basis.

In the liabilities we find a similar distinction, in the character of the liabilities, to that we found in the assets. There are current liabilities as there were current assets, and there are slower liabilities as there were non-current assets. Among the current assets we find bills or notes payable to banks, bills or notes payable to merchants for merchandise and perhaps bills or notes payable to individuals for money loaned to the concern. There will be in most cases accounts payable for merchandise that must, according to terms of sale, be paid in a comparatively short time. There may be deposits of money on orders or for other purposes of a demand nature. There may be amounts payable for accruals of interest, etc. In addition to this there may be other demand liabilities that should be included in the *group* of current debts.

To make the selection and the total of this class of debts as conspicuous as it should be the writer adopted the same method as in the matter of the current assets and after allowing several blank lines for adjustment purposes had the form ruled off with a green line so that these current liabilities could be footed together in green as was done on the asset side.

There is another class of liability of a different nature from the current debt. This is composed of such debts as are funded

for a longer and definite period. In this class we find mortgages, bonds and long-time notes. If any mortgage or bond issue is to be paid within one year, however, unless a definite refunding agreement is already signed as a matter of record, such items must be figured as a part of the current liabilities.

Although these items should not be figured as a current liability they are, however, a liability and should be included in the total liabilities or the whole debt. To accomplish this in a regular and noticeable way the writer, after allowing for several lines of adjustment, had a line ruled in red across the sheet and sub-footed the figures for a total debt including the current liability sub-footing and such funded debts as were entered under them. This sub-footing was put on the sheet in red so as to make it stand out clearly and prominently.

The liability side of the statement contains some other items that as a matter of bookkeeping appear as liabilities but are not true or actual liabilities. These are the reserve accounts. They represent amounts taken from the surplus and set aside for the purpose of taking care of some decline in the assets. They are not used except as that decline occurs and are not then subject to outpayment in cash but are an offsetting charge-off to make a balance. Such items are reserves for bad and doubtful accounts, reserves for depreciation of machinery fixture and the like and reserves for the possible depreciation of value of merchandise on the statement. Machinery is of course bound to wear out at last and the amount set aside for its depreciation will then be consumed. But it is possible that the amounts set aside for the loss in bad accounts will not be used and can later be retransferred to surplus. Therefore these items should be set below the place where the total debts have been figured.

The remaining parts of the balance sheet are composed of

the capital surplus, undivided profits, and, in the case of a single owner or partnership, the net worth. In the corporation form it may well be set as a policy to foot the capital, surplus and undivided profits so as to show the net worth of the organization as this will avoid the mental effort and reduce the danger of mental error that is always present when examining the statement and not having this record set down plainly.

In the setting up of a reserve of depreciation on machinery it is well to consider the percentage that is charged off into this account, as sometimes there is a phraseology that may be misleading. It is more or less common practise to charge off ten per cent. on machinery and fixtures. The question is whether this ten per cent. is figured on the original cost or on the book value as of the first of the periods under consideration. If it is on the original cost then in a period of ten years the reserve will be equal to the full cost of the items. But if the practise is to charge off ten per cent. on the book value as of the first of the year this will not be the case and in this connection it is interesting to follow through in computation form this method and see where we would be at the end of ten years if adopting this method.

Original Cost	$100.00	
	10.00	Charged off first year.
Book value 2nd yr.	90.00	
	9.00	" " second "
" " 3rd "	81.00	
	8.10	" " third "
" " 4th "	72.90	
	7.29	" " fourth "
" " 5th "	65.61	
	6.56	" " fifth "
" " 6th "	59.05	
	5.90	" " sixth "
" " 7th "	53.15	

	5.32	" "	seventh "
" " 8th "	47.83		
	4.78	" "	eighth "
" " 9th "	43.05		
	4.31	" "	ninth "
" " 10th "	38.74		
	3.87	" "	tenth "
Value after 10 yrs........................	$ 34.87		

This means that if the percentage of ten per cent. has been figured not on the cost but on the reducing yearly value that at the end of ten years the one hundred unit has been charged down to $34.87 or 65.13 per cent. of the original cost or an average of a little over 6.5 per cent. per year. It is not suggested that the charge off for depreciation is stated at ten per cent. and then figured this way so as to fool the creditor. It may be done through a misconception in the proper method. It is suggested that the phrase ten per cent. charged off for depreciation should, however, be clearly defined.

Another method used sometimes in the creation of a reserve for depreciation is that of figuring the reserves as an invested fund at interest and compounding the interest for the remaining period so that at the end the sums set aside will equal each to ten per cent. of the total. For instance if with a unit of one hundred as we have just discussed it would not be necessary to set aside the full ten dollars the first year if the money were taken out and invested in an interest bearing security or loaned at interest. A somewhat smaller sum would at the end of the period at compound interest equal the ten dollars. If this method were to be adopted then the subject would actually have to invest the sum in interest earning investment and actually add the interest each year so that the accumulation would accrue to the fund. This is not a general practise in commercial statements, but it might

obtain results and then the credit man should be familiar with the practise and see to it that the record of the investment of the funds was clear so that actual accruals would be sufficient to accumulate the required reserve.

There is another source of depreciation that can not be reduced to a normal proportion. This is obsolescence. In nearly every industry there is a continual development of machinery so as to secure more efficiency of production. This may mean that to compete successfully a manufacturer must discard his old or present machinery that is by no means worn out from use and not protected by wear and tear depreciation reserves and buy new and later date machinery. There is no way of figuring a normal risk so as to set aside a yearly amount to build up a reserve for this purpose. But the creditor should in a measure protect himself against the possible condition of his risk being confronted with a large charge-off for this purpose by examining each year the character of the machinery and having some knowledge of the machinery efficiency development in any industry so that he may decide whether or not the risk is operating too close to the margin of inefficient machinery so that during the coming year he will be faced with the absolute necessity of replacement. Such a condition might easily make for the turning bad of a risk that was not in a very strong position.

There has been a tendency to figure the reserve for taxes as a reserve and conceal or at least group it with the other general reserves. This is an absolute mistake. There can not be any more current liability than what is owed for taxes. The actual date is set when the payment is to be made and here little grace is allowed. Therefore if there is not any reserve for taxes we have an incorrect way of figuring and if the reserve is concealed in the general reserves we have a very evident misconception of the

function of a reserve account. The item for taxes as estimated, and this should be carefully estimated, should appear in the current liabilities and should be figured against the current assets. No other method is correct.

The accompanying comparison form is designed to carry out the method described and if the credit man will himself or have an assistant transfer the figures to some such form he will find in time that year to year conditions will become readily camparative to a much greater extent than if no such record is kept.

Having established a comparative balance sheet we progress to the actual analysis of the condition as displayed by the figures. This involves a study of the figures subdivided in groups as we have arranged for in the comparative sheet.

The first law or axiom of general acceptance is a study in proportion between the current assets and liabilities. While there is a wide deviation in this ratio, as will be explained and commented on in the next chapter, still by common practise a proportion of two units of current assets for every unit of current debt, a two hundred per cent. ratio, has become a more or less accepted measure of soundness. While the writer differs from the common acceptance of this more or less standard he still recognizes its general acceptance and in many cases its true worth. The real value of it, however, does not lie in its approximation to two hundred per cent., because this is a variable ratio, but in its condition of flux. Therefore a change in the current ratio is of prime importance and this comparison of current assets to current liabilities should be effected each year and reduced to a percentage ratio so that fluctuations in the percentage can measure the degree of increase or decrease of the goodness of the risk. A space to accomplish this has been provided at the bottom of the comparative sheet.

COMPARISON OF STATEMENTS

ASSETS					
Cash on Hand and in Bank,					
Bills Receivable, all good, on hand,					
Bills and Acct's. Rec. due from Officers or Stockholders,					
Accounts Receivable, all good, due from customers,					
Merchandise, finished,					
Merchandise, unfinished,					
Raw Material,					
TOTAL QUICK ASSETS,					
Real Estate,					
Buildings,					
Machinery and Tools,					
Furniture and Fixtures,					
Prepaid Insurance,					
TOTAL NON-CURRENT ASSETS,					
TOTAL,					
LIABILITIES					
Bills Payable for Merchandise,					
Bills Payable negotiated to Banks,					
Bills Payable otherwise disposed of;					
Bills and Accounts Payable due Officers or Stockholders,					
Open Accounts, not due,					
Open Accounts, past due,					
Deposits of Money,					
Interest Accrued,					
Pay Roll and Salaries Accrued,					
Reserved for Taxes,					
TOTAL QUICK LIABILITIES,					
Liens or Mortgages on Real Estate,					
Bonded Debt,					
TOTAL LIABILITIES,					
Reserves,					
Capital,					
Surplus, including undivided profits,					
Net Worth,					
TOTAL,					
Total Quick Assets,					
Total Quick Liabilities,					
Excess Quick,					
Deduct Reserves Against Current Assets,					
Net Excess Quick,					
Ratio,					
Sales,					
Net Profits Last Year's Business,					
Dividends or Withdrawals,					
Insurance on Merchandise,					
Insurance on Real Estate,					
Contingent Liability,					
Outside Worth of Sureties,					

While it is important that any subject risk maintain itself in a position where it could liquidate eventually it is only of slightly less importance to have the risk measured so as to be able to judge whether or not it could also be expected to liquidate rapidly in order that funds invested could be released quickly. This is also very important not only as a measure of the possibility of a final going out of business but as indicating an ability to perform a semi-liquidation so as to contract its business and reduce its debts at an economically opportune time. In an economic period of tight money and shrinking credit it is that concern which has itself in the most liquid condition that can meet the situation the best and maintain its credit at the highest, securing any credit favors that there may be to bestow.

THE SO-CALLED ACID TEST

The acid test is a phrase that has been coined and adopted as a measure by some of the keenest credit analysts in the country. In brief this consists of totaling the actual cash, the accounts receivable, the notes receivable when it is well known that they represent truly current items and not past due accounts, and at least the equity in United States Government Bonds. These current items are perhaps the very cream of the cream of the whole assets, the most liquid. Absolute cash can of course be immediately used to pay debts. Accounts and really liquid bills receivable mature steadily and in their payment produce more absolute cash. United States Government Bonds can always be sold, almost instantly, and at a very close margin to an easily determinable figure. Thus the absolute cash plus the second two items which can and do normally transform quickly into absolute cash form a most quick asset, the total being very near to absolute cash itself. This total is then measured against the total of the cur-

rent liabilities and to meet the acid test is supposed to equal it in amount.

This means that the whole inventory and any other current assets are disregarded as a basis for paying out the current debt except as they may be relied on to take up the slack caused by any slowness in the receivables. This may perhaps seem a drastically severe test to apply to a statement and there are many risks that could not measure up to it and that are still good in spite of this inability. It is, however, a very conservative standard to assume and if used, as it generally is, with allowances, as a background to be approximated rather than a yardstick, it becomes a very valuable part of an analysis. Risks that were able to maintain this proportion but indicate a slipping away might come in for a somewhat closer analysis while one might feel easier about a risk that had succeeded in achieving this position after some years of a lower scale rating.

THE OPERATING STATEMENT

In commercial life and from a purely commercial aspect business success and even the continued existence of any business is absolutely dependent upon the making of profits. To make money means to increase the wealth under the control of the industry and if this increase is regular, even if not large, the business is in a position of progressing.

The operating statement showing the volume of business, the profits made, the distribution of such part as is withdrawn from the business and the remainder that is left to accumulate to the benefit of the business is a very important item. Many credit men have said that the operating statement is more important to them in measuring a risk than the property statement itself. This may and probably is a somewhat overstatement of the fact

but when we are making a purely comparative analysis of figures in bulk it is almost equal in value to the property statement. An operating statement properly presented indicating a normal profit for the volume of business indicates that the risk is making the regular trade profit and advance and that, all other things being equal, it is therefore under competent management.

RECONCILEMENT OF SURPLUS

It sometimes happens that in comparing two net worths for two consecutive years we may find that the difference between them does not exactly equal the net profits as reported in memorandum by the risk. It is most interesting, therefore, to get from the risk a reconcilement of the surplus account. To get this in its full completeness the full net worth of the beginning of the period should be indicated. To this should be added all profits and from the result should be subtracted all disbursements from surplus, indicating their character, whether as dividends, reserves, losses, etc., leaving at the end of the operation the net worth as of the end of the period. Such an addenda to the mere asset and liability statement would throw a great deal of light on the risk and its money making ability as well as its method of disbursing its earnings. This information is not always available and when a study of the two net worths checks up with the reported earnings or net profits may not be essential. But when there is a discrepancy as between the difference in the two net worths and the reported net profits the necessary questions should be asked and the information insisted on to explain why such a discrepancy should exist.

For some reason or other it is often quite difficult to secure a memorandum concerning the volume of business or the annual sales from some customers. Many customers who give a com-

plete asset and liability sheet balk at giving the sales. Nevertheless the securing of the items of sales is a very essential matter and should be a piece of information upon which the credit grantor should be very insistent upon securing. The objection is sometimes raised that this is too confidential because of the fact that it would disclose too much of the company's affairs to a competitor if by chance it should leak out. The answer to this objection is first of all, that credit information given by a customer to a credit department, if worthy of being recognized as a real department, does not leak. The second answer is that if a competitor could understand the ins and outs of a business from the sales record then this is in itself conclusive proof that to understand the condition of the business satisfactorily and extend it the full normal credit requirements the creditor should have this item so that he may understand the business and be in a position to pass intelligently upon the status of the risk.

The question of insurance is a very important one in considering a credit risk. It has almost become an axiom that fire insurance is absolutely essential, but the credit man of the creditor company should also know something concerning the method of insuring and the percentage basis and any qualifying classes that might vitiate the policy.

In addition to fire insurance the question of life insurance upon the life of the leading executive or executives in the risk for the benefit of the company and the protection of its creditors in case of their death is rather becoming a very well recognized and important consideration. The condition of this policy and its qualifying clauses should also be well understood and accurately defined.

Use and occupancy insurance, to protect a concern from loss due to inability to fabricate as the result of a fire or explosion, is

also coming to be recognized as an important factor in the stability of a credit risk and the advisability of carrying this kind of insurance should carefully be investigated by the credit grantor.

The condition of the receivables is a matter worthy of close attention. It is often a practise to extend the sales terms period by accepting a note or a series of notes in settlement of an account at its maturity either in whole or in part, thereby extending the sales terms. While it is often necessary to do something of this kind as a collection method, its effect upon the liquidity of the total receivables is a very important matter and where any considerable amount of notes receivable appear on a statement definite information and a definite statement from the debtor should be forthcoming as to the creation of these bills receivable, indicating quite clearly whether it is the custom to have receivables based on the original sale or whether they are receivables resulting from past due accounts. If this is the case any considerable accumulation of these bills receivable should be viewed with a certain amount of suspicion.

Also, where bills receivable appear upon a statement care should be exercised to determine definitely whether this is an equity in the bills receivable, part of which have been rediscounted, creating a contingent liability. Contingent liabilities have often turned into direct obligations and in more than one instance have been used as a method of chicanery and have often swamped a company that by rediscounting them has been eased in its own position and on account of this has fallen into lax collection methods. The credit man can not be too careful in determining the real quality of the receivables.

The credit man should also assure himself by direct inquiry from the risk and by direct statement by the risk concerning any possible contingent liabilities arising from endorsement, guaran-

tee, hypothecation of notes receivable, hypothecation of accounts receivable or in any other wise whatsoever. Contingent liabilities have been a source of failure in many instances.

The credit man should also understand the practise in different lines of business concerning future commitments. It is sometimes a practise to make a contract for future delivery of merchandise and not include this contract as a debt payable because of the fact that the merchandise itself has not been included in the inventory. In some instances the merchandise may be actually on hand but the invoice may have been post-dated on longer terms. If the company is honorable and expects to live up to its buying contracts there is an actual debt offset by this purchase of inventory and by the merchandise items and this should appear on the statement directly or should be very clearly shown in a notation in connection with the property statement.

CHAPTER VIII

Analytical or Internal Analysis

COMPARATIVE OR BULK ANALYSIS

In our preceding chapter we discussed the more or less generally adopted method of statement analysis which consists in placing into periodic or yearly comparison, in a progressive manner by the use of a columnar sheet, the various items on a property statement. The tendency of this kind of analysis has been to stimulate comparison in bulk rather than to stimulate any comparison of proportions.

While a comparison in bulk is interesting in connection with growth or possible inflation, the growth being perhaps artificial, it does not create a definite impression as to proportions and on this account is very lacking in some of the most necessary elements for a proper and complete analysis.

We have seen that it has become a practise to put into comparative relationship the current assets and the current liabilities of successive statements. Through the tests of experience and based entirely upon the inspirations of such experiences, it has become almost axiomatic that this ratio should indicate a relationship of two hundred per cent. That is, that the current assets should amount to two hundred dollars for every one hundred dollars of current debt as shown upon the property statement. There are altogether too many credit men who have accepted this proportion, explicitly and without reserve, as a standard basis in determining the goodness of a credit risk. The

determination of the point at which normality lies, for this particular relationship, has not been the result of concentrative or thoughtful study but has grown up because of the desire to allow for a margin of shrinkage, in the current assets, equal to the current debt.

It has been suggested recently by some credit men, of such standing that their opinions warrant real consideration, that the expression of the current ratio based upon a fraction in which the current assets are the dividend and the current liabilities are the divider and the result a quotient greater than the divider is incorrect. It has been argued that, in the establishment of this fraction, the current liabilities should be the dividend, the current assets the divider, the resulting quotient would then indicate on what percentage basis in liquidation the current assets would have to pay out in order to pay the current debt completely. The only logical argument against this method which, from a statistical method basis is unquestionably more scientific, is that common practise has established the current ratio on the other basis and it would be necessary to revamp all the records of all the departments that have compiled the current ratio on this basis.

This brief analysis of the current ratio is reviewed again, although mentioned previously, because of the fact that the adoption of the current ratio acknowledges the fact that a mere comparison of bulk amounts is not sufficient and that a study of proportions is not only important but even imperative. If this is so and the principle of proportional study is so vindicated, as it seems to be, by the common practise of establishing and accepting this particular ratio as a logical measure of credit strength, then the question arises as to whether or not statement analysis can be complete by making solely a comparative bulk analysis, supple-

menting this with only one fractional or proportional study, or whether other proportional studies are not advisable.

SUPPLEMENTARY OR COROLLARY RATIO

The writer, in his own credit investigation, has been willing to accept the current ratio as a starting point for two reasons First, because it seems to be a logical comparison in order to establish the margin of possible shrinkage in assets and yet liquidate the current debt in full. Second, because of the fact that it is in an already well-established and well-recognized general measure of credit standing. The true significance of the current ratio, while it has been a standard, almost a fanatical standard, at two hundred per cent., is not perhaps as thoroughly understood in a more obscure angle. Attention was drawn to the fact in the last chapter that the real fundamental value of a study of the current ratio lies not so much in the development of the percentage at which the current ratio rests, as in a study of the direction in which the current ratio is traveling. This means that an increasing current ratio may normally be expected to accompany an improving condition and that a receding current ratio may normally be expected to accompany a weakening credit condition.

The fact that the current ratio has been accepted as a standard of credit standing determination is not only a condition, in the minds of the credit grantors, but is also recognized quite as well as a condition by the large majority of credit seekers. This knowledge, by the seeker of credit, that his statement will be examined and tested by the proportion and balance of his current ratio has led to what has come to be known as "window dressing." In order to understand this practise it becomes essential to engage in what we may term a little credit arithmetic. The current ratio being accepted, for argument only, as ideally located at

two hundred per cent. puts the statement in a position in which the asset and liability side is of course not equal. This means that the addition of an equal amount to both the current assets and the current liabilities has the effect of diverting the current ratio by changing the proportions. An increase to both the current assets and the current liabilities can only keep the ratio at the same point *if* the increase is in the same proportion as expressed by the ratio.

This can perhaps be more clearly shown if displayed in tabular form.

	1st period	2nd period.
Current Assets	300 units	200 units
Current Liabilities	200 units	100 units
Ratio	150 per cent.	200 per cent.

In the above table it is supposed that, as between two periods, a company indicates in the first period three hundred units of current assets with which to pay two hundred units of current debt establishing the current ratio at the proportion of one and one-half for one or one hundred and fifty per cent. It is supposed that the maker of the statement has realized that a one hundred and fifty per cent. current ratio will not meet with the standard of measurement generally adopted. With this in mind he has realized one hundred units from his current assets by one of several processes. He may have actually, through forced sale of merchandise, transformed a part of his current assets into cash. He may have largely depleted his cash account. He may have forced collections running receivables into cash at special discounts or by other forced means more rapidly than normal. He may have actually or temporarily, honestly or dishonestly, disposed of merchandise or hypothecated receivables, having received cash, perhaps on a temporary repurchase agreement. With these liquidated assets he has reduced his current liabilities

by an equal amount—one hundred units. This operation has left him with both his current assets and current liabilities reduced by one hundred units and this process has established a two hundred per cent. current ratio. If this has been a normal process it is not subject to criticism. If it has been an abnormal process in which inventory, etc., has been temporarily reduced below normal requirements, in order to reduce debt, in spite of the fact that the statement shows a two hundred per cent. current ratio the subject can not be in a healthy condition.

This matter of "window dressing" has led to a peculiar condition of mind by the debtor which, in quite a number of well defined cases, has led to the perpetration of certain financing methods that, while they might be technically defensible, are ethically incorrect. One typical instance in which a debtor, wishing to make a better proportional statement in the current ratio did some financing, is particularly interesting. The statement was made as of January first. On or about December twenty-sixth or twenty-seventh friends of the debtor took over certain of the assets, securities, merchandise, etc. With the funds thus raised the debtor decreased his current debts a day or two before the end of the year. The statement rendered and accepted as a basis of credit dated January first was based upon this artificial condition which was technically the actual condition as displayed by the books. The proportion of the current ratio was satisfactory, on this basis, and the credit standing of the debtor, based upon the current ratio proportions, might not have been questioned because of the fact that, according to accepted standards, it was reasonably well proportioned. However, shortly after the first of the year, being approximately the first or second week in January, and in accordance with a perhaps rather definite agreement, the debtor took back the hypothecated current assets having

been able to continue his credit lines as based on the technically honest and correctly proportioned statement. This addition to the current debt and to the current assets of an equal amount, as represented in dollars and cents, depressed the current ratio to a point, which, if rendered on that basis, would have raised a serious question as to the credit strength of the risk.

The whole point of this story is that by an adjustment of the figures, which represented the actual condition of the books and which if not gone behind, might have been handled in an accounting and certified to as a true condition, produced a statement which was not ethically honest and which was not sound as a basis for credit. To a greater or less degree this practise of "window dressing" is very largely prevalent. Without wilful dishonesty and without even ethical dishonesty, as expressed above, it is only logical for a debtor, in order to show as good a current ratio as possible, to close his books and end his fiscal year at such a period as will show on the statement the greatest indication of liquidation and the lowest debt, which time will be the point at which he can show the highest current ratio. This means that honest and dishonest "window dressing" is not only prevalent but comparatively easy when too great faith is pinned upon an analysis based upon one proportional study.

The fact that a proportional study method is vindicated and accepted by the development that has taken place in the use of the current ratio suggests that if this proportional study is of value other proportional studies might logically be expected to be of at least as much or perhaps greater value. With this in mind the writer has been experimenting with the development of other ratios. These ratios have two main characteristics. The character of the first is the development of comparisons and the reduction of these comparisons to percentages as between items of

acquired asset or liability nature. These ratios the writer has designated as the static ratios, in that they represent the state of development at the time of the issue of the statement. They are made up by the placing into relationship of various items of assets and liabilities.

The second set of ratios has been designated, by the writer, as velocity ratios in that they are made up of a comparison of the volume of business, which is the velocity of the business, with certain of the assets and liabilities indicating periods of consumption or productivity of certain units.

The static ratios are:

1. The Current Ratio, already discussed
2. The ratio of Receivables to Merchandise
3. The ratio of Debt to Net Worth
4. The ratio Net Worth to Non-Current Assets.

The velocity ratios are:

1. The ratio of Sales to Receivables
2. The ratio of Sales to Merchandise
3. The ratio of Sales to Net Worth
4. The ratio of Sales to Non-Current Assets.

THE STATIC RATIOS

1. The Current Ratio.—The questions surrounding the current ratio have already been discussed, thoroughly. Mention is merely made of this ratio again at this place because this ratio is the basic or starting point in the development of the ratio method of internal analysis. It is also mentioned first in the static ratios because it is an already generally accepted ratio.

2. The Ratio of Receivables to Merchandise.—It has become common practise, even to standardization, that merchandise should be shown upon statements at cost or present market value if the replacement purchase price has fallen below cost. The theory of this is elemental and is based upon the principle that

profit should not appear in inventory, or more broadly that neither profit nor loss should appear in inventory, but that inventory should rest at present market level. This in theory and practise is sound because a profit is not made until merchandise has been sold for cash and the cash has become available with which to retire debts, caused by the purchase or fabrication of merchandise. The amount that one will receive for the merchandise inventory can not be positively known until the actual cash is in bank, as the result of the sales transactions plus collections. For this reason no profits are allowed to be developed by the carrying of merchandise above its actual cost and in contra to this it has been accepted as good practise that no losses should be concealed by the carrying of merchandise above the present replacement value because merchandise will have to be sold in competition based on present replacement values irrespective of its original cost.

When we move from the consideration of merchandise, and its basic valuation at cost or replacement value, and begin to consider the items of receivables we are confronted with an entirely different situation. In receivables we find the item representing cost of merchandise plus profit. An item that represents, while in the inventory, one hundred units of value and which has been sold at an advance of fifty per cent. gross profit stands, as a receivable, at one hundred and fifty units of assets. No one has yet advanced the theory that receivables should be carried at cost until collected. In a seller's market, in which the supply of goods is scarce and in which demand is particularly active, such a period as we went through during the years of 1915 to 1919, and early in 1920, it may seem somewhat inconsistent to compel the carrying of merchandise at cost and allow receivables to be listed at cost plus. This is so because of the fact

that in a market in which shortage of merchandise is the predominating feature, merchandise might almost be considered as sold as soon as received and might, therefore, be considered worth the full sales value. This is not advanced as a plea or even as a suggestion for the listing of merchandise other than as now advocated, but simply to call to attention the general psychological attitude of the creditor in his analysis as between his consideration of merchandise, and his demands that it be figured at cost, and his consideration of receivables, and his allowing them to be entered at cost plus, irrespective of economic conditions or effect upon the proportions of the statement.

To digress temporarily the writer would mention a peculiar argument, advanced by a former customer of his, to substantiate his listing of merchandise which he carried at sales price so that there was no difference in the figures when merchandise was transferred to receivables. His argument was based on the fact that the full production capacity of his plant was booked on order for eight or nine months in advance. This was considerably prior to the war period so that the peculiar conditions of that time have no bearing on this story. This particular merchant argued that it was perfectly correct to carry his merchandise at sales price because of the fact that the transfer from merchandise to receivables, which were always carried at sales price, was merely a matter of bookkeeping and the time necessary to perform the physical operations of putting the finished product in the packages and on the cars. This story, however, is not advanced as an argument in favor of carrying merchandise at sales price, but is injected simply to call attention to the fact that there are times of economic activity in which there is not the technical difference between merchandise and receivables as might be expected and as ordinary analysis recognizes.

It is not to be argued, because of the physical difficulty in accounting, that we should begin a practise of demanding that receivables be carried at cost. The difference between the character of the two items and the acknowledged accounting methods in carrying them on the books has been talked about and analyzed simply as a basis for the development of a ratio study and so that this study and its use might be more thoroughly understood.

The facts are that the transformation of merchandise into receivables, by the process of sale, makes it customary to add to the asset the profit represented between the cost of production and its sales price. This of course swells the current assets. In order to understand this process better it might be well to refer to the method of an arithmetical example as was done in the study of the current ratio.

	1st instance	2nd instance
Receivables		75 units
Merchandise	50 units	
Current Debt	25 units	25 units
Current Ratio	200 per cent.	300 per cent.

In the above arithmetical table it is presumed that we have eliminated everything from the statement except merchandise and current liabilities. The proportion of these two has been set so as to produce the time honored two for one or two hundred per cent. current ratio. It has then been presumed that in the selling of this particular merchandise a fifty per cent. margin over cost of production has been added to establish the sales price. Therefore the fifty units of merchandise when sold will appear on the statement as seventy-five units of receivables. The transformation has been accompanied by little or no necessity for increasing the current debt. Therefore in the second instance we have seventy-five units of receivables, as compared to the same twenty-five units of debt, and have established a current ratio of three hun-

dred per cent. by the process of transforming merchandise into receivables.

It is not to be presumed that this fifty per cent. increase in valuation will always be present in such a transformation. If twenty-five per cent. had been added the receivables would have appeared as sixty-two and one-half units of assets against twenty-five units of debt and the current ratio would have been two hundred and fifty per cent. If a lesser margin of profit had been added the increase in the current ratio would have been less, but in any event the transition injects into and adds to the assets side of the current ratio probably an amount greater in proportion than it can possibly add to the liability side. If this were not so, there could be no profit in the business. Therefore if we have a statement primarily merchandise, as to its current asset, and later a statement of the same industry primarily receivables, as to its current assets, the transition ought to be followed by a rise in the current ratio. If this is not the case then the management of the industry has added something, in the nature of current debt, for some purpose or other which has offset the increased current asset represented by the profits added in the transforming of merchandise into receivables. This offsetting manipulation is a matter for investigation, by the credit man of the creditor, so that he may understand the operations of the debtor and determine just why the negative operation was necessary.

If from year to year or from period to period we find an increased proportion of receivables, as compared to merchandise, we ought then to expect to find a rising current ratio. In contradistinction to this, if we find a decreased proportion of receivables as compared to merchandise we might logically expect, as between any two periods, a declining current ratio because of the fact that the condition of the debtor has approached more nearly to the

cost basis. A study of this ratio then and its comparison for different statements from period to period will in a great measure explain fluctuations in the current ratio which may be more fanciful than real. The study of this ratio may eliminate much of the increased confidence expressed by a rising and it may vitiate to a great degree any fear arising from a decreasing current ratio.

A study of this ratio from year to year may also disclose the fact that a company may have pushed out its inventory to agents, carrying the items as receivables, in order to get the benefit of apparent sales whereas, as a matter of fact, the inventory thus pushed out is still, as a liquidating proposition, inventory and not true receivables. The full significance of this particular use of the ratio will be more readily understood and appreciated when we discuss it in connection with some of the velocity ratios in our next chapter. The fact that it can be thus used, however, and that it can also be used in connection with a study of over-inventoried conditions should be actively kept in mind.

3. Debt to Net Worth.—When a new industry is organized and begins business the owners of the business must perforce, under anything like normal conditions, advance or have in their possession a sum of money or marketable goods or productive machinery with which to carry on the business. This may be spoken of as their capital.

Except in rare instances the capital thus provided is not sufficient as a basis for the operations of an industry at all times and therefore it is rarely possible for an industry to conduct its business without a considerable addition to the funds provided by the owners of the business. These additional funds are represented by the debts of the industry.

The debts of the industry represent wealth or goods or services or the credit with which to buy goods or services that are either sold or loaned to the industry by individuals, sources of supply, or banks that have confidence in the solvency of the industry and are willing to extend it credit. By this operation the creditors of an industry place at the disposal of that industry, for temporary use, part of their wealth which is used by the debtor industry in carrying on its business and in the same way that the capital of its owners is used. As a matter of fact, it would be practically impossible to determine at any one moment an exact division of the assets of an industry so as to indicate what part was paid for and was contingent upon the capital of the owners and what part was contingent upon and had been purchased by the funds advanced by the creditors of the business.

We are, therefore, confronted with the fact that, in the operation of an industry, capital of two ownerships is employed: the first being the capital advanced by the owners and the second the capital advanced by the creditors. On this premise it becomes interesting to study from year to year the proportion that exists between the owned and the loaned capital. If the debt of an industry is equivalent to the net worth then fifty per cent. of the assets are secured from funds belonging to the creditors and the creditors are equal partners with the owners of the business in the control of the funds being used in the activities of that business.

If in successive years or successive periods we find the percentage of debt increasing in its relation to the net worth the industry is in a position of relying to a greater and greater extent for its economic capital upon the good will of its creditors. If a business has expanded considerably and the debt ratio has risen, the expansion has been made possible by the greater assets secured through extensions by the creditors of the industry.

As the debt ratio rises, the moral risk in connection with credit extensions to an industry plays a more and more important part because of the fact that any shaking of confidence, that would tend to dislocate in any wise the faith of the creditors in the future of such an industry, would affect a larger and larger part of the economic capital being used in the industry. Therefore a proportional ratio study developed as between the total debt and the net worth becomes very interesting as it discloses the control of the economic capital at use. This ratio may forewarn a creditor that the over-optimism of the debtor, and other creditors perhaps, has allowed the industry to get caught in a position that may jeopardize its future because it has begun to rely too greatly upon the good will of its creditors and has expanded its business beyond the reasonable limits of the investment of the owners.

What may appear to be an abnormally large debt to net worth ratio may in some instances be ameliorated by the fact that a comfortable portion of the whole debt has been funded either through mortgages or bond issue or long-term notes. When a large debt to net worth ratio is in evidence, but a considerable portion is funded, it is advisable to establish a current debt to net worth supplementary study to see whether this is reasonably low.

If a fifty per cent. debt to net worth ratio seems reasonable and we find a seventy-five per cent. debt to net worth ratio it would seem that the current debt to net worth ratio should be something below the normal fifty per cent. This should be true because when a proportion of the debts is funded those debtors, after a manner, have advanced permanent funds in a nature somewhat similar to the owners and the necessity for short time or current debts should be thereby materially reduced. On the basis just mentioned the probability is that a safe current debt to net worth ratio ought not to exceed approximately thirty per

cent. and that approximately forty-five per cent. of the total debt to net worth should be in the form of funded debt. These proportions are, of course, variable in accord with the confidence in the productivity and the moral risk and this should be very carefully borne in mind and allowances made for reasonable variations.

4. *Net Worth to Non-Current Assets Ratio.*—As we have seen in the discussion of comparative statement analysis there are two general types of assets. These are current assets and non-current assets. The non-current assets are in the nature of capital assets and should be largely provided for by funds advanced, owned, and controlled by the owners of the business. It is not sound economics nor good business judgment to have non-current assets represented by that part of the whole working capital which has been supplied by the creditor except as it may in a measure be logically provided for by funded debt under certain stipulations and agreements. Practically never should this type of asset be purchased from current debt.

If we establish a proportional or ratio comparison reduced to percentages as between the net worth and non-current assets, we can determine what proportion of the owner-controlled funds or capital is left over after the non-current assets have been financed and are at the disposal and can be used for the current operating features of the business. Under the Federal Reserve Bank Act, only such paper is eligible for rediscount as has been used to produce funds for commercial purposes. This terminology specifically eliminates from eligibility notes that have produced funds that have been used for capital purposes. The first test, then, to establish the eligibility of a note is to prove that there have been separate funds advanced by the owner of an industry to purchase all of the non-commercial assets; in other words, the non-current

assets. If the net worth of the industry is sufficiently great that it can be proved to be sufficient to purchase the entire non-current assets and leave a substantial margin to invest in current assets, it is logically true that all of the current debt, which includes the notes of the company, could have been used for commercial purposes.

In comparative analysis an increase in the net worth as between any two years or periods creates a feeling of security in the mind of the analyst. This is because the making of profit is a primary test of success, commercially speaking. In a period of rising prices, it is, however, certain that a tremendous psychological force is present tending to stimulate increased plant. The fact that extra profits are made because of rising prices on raw materials during the period of fabrication has been so often advanced that the statement of it again is almost a platitude. It is, nevertheless, a fact, and this fact means a stimulus is present to increase plant faster than normal so as to take advantage of this additional profit as long as we are in this period of rising prices.

If then, we are to analyze the increase in net worth as between any two years or periods in which an increase is present, we can add a considerable degree of security to our analysis if we include, in this comparison, a comparison of the ratio that exists on both statements as between net worth and non-current assets.

If we discover by this method that while there has been an increase in net worth that the ratio of net worth to non-current assets has declined, we may be reasonably sure that the owners of the business have expanded plant more rapidly than the normal growth in net worth of that industry. If this dislocated expansion be considerable, indicated by a large falling off in the ratio of net worth to plant, it may mean that the company has trans-

formed a considerable proportion of its liquid capital into fixed capital that will in a period of depression, through the necessity of paying dividends on it, be a considerable drag on the industry when the plant will not be as productive as had been expected. Over-plant expansion, over-investment in non-current assets, has put many an industry in a corner where it has had to fight for its life and where its creditors have had to carry it for a considerable period in hope of receiving full payment of their claims eventually.

It is not enough then, that an industry should show an increase in net worth but it must make reasonable disposition of this increase not disbursing it in dividends to an abnormal degree, and not transforming this additional capital into fixed capital beyond a reasonable proportion.

A further use of this particular ratio will become evident when we discuss the velocity ratios in our next chapter. At the present time it should be borne in mind as an indicator as to what disposition has been made of the increased net worth.

DERIVATION OF RATIOS

The Current Ratio.—To secure the current ratio, divide the total of the current assets by the total of the current liabilities and to establish this on a percentage basis multiply the result by one hundred.

The Receivables to Merchandise Ratio.—To secure this ratio as described and explained, add the accounts and bills receivable on the property statement and divide by the total of the merchandise inventory. In order to reduce this, relation to percentages, multiply the resultant by one hundred.

Debt to Net Worth.—To secure this ratio, divide the total debt, both current and funded, by the total net worth. To reduce this to percentages, multiply the resultant by one hundred.

Current Debt to Net Worth Ratio.—To secure the current debt to net worth ratio, divide the total of the current debt by the total net worth and to reduce this to percentages multiply the result by one hundred. This is a supplementary ratio where there is a funded debt and a high debt to worth ratio.

Net Worth to Non-Current Assets.—To secure this ratio, divide the net worth by the total of the non-current assets. To reduce this to percentages, multiply the resultant by one hundred.

CHAPTER IX

Analytical or Internal Analysis—Continued

THE STATIC RATIOS

In our last chapter we discussed the development of four principal and one subsidiary static ratio. These ratios tend to disclose the proportions existing between actual component parts of a property statement or balance sheet. Both of the component parts of each ratio are made up of items taken from the actual figures of the balance sheet itself. The fluctuation of these items and their proportions to each other are a measure of the actual condition of the industry. When compared year by year or period by period they tend to indicate the varying proportions and strains that the industry is developing. Their use expands the older current ratio, or two for one method, by qualifying this ratio and adding thereto, through proportional studies which are as logical and important from an analytical standpoint as is the adoption and use of the current ratio itself.

THE VELOCITY RATIOS

There is, however, a condition of quality in both current and non-current assets that is not touched upon to any very great extent by the use of these static ratios. This qualifying study is in the direct field of the velocity ratios which it will now be our task to investigate and discuss. These ratios, like the static ratios, are four in number and consist of establishing the proportion that exists between sales and, in each instance, receivables, merchan-

dise, net worth, and non-current assets respectively and individually.

Sales to Receivables Ratio.—In the static ratios receivables form a part of the current ratio and an important part. As we have seen, in the study on comparative bulk analysis, receivables are an important part of the assets in connection with the so-called "acid test," but in both of these studies, the current ratio and the "acid test," it is the bulk of the receivables that plays the important part and not their quality.

There is little doubt but that any creditor would be willing to continue his credit risk to a debtor, in spite of a lower current ratio or in spite of a considerably subnormal current ratio, if he could be assured of the freshness of the receivables and their normal or greater than normal liquidity. Particularly is this true in the use of the receivables in connection with the "acid test" method. The question then develops as to how the character of the receivables and their liquidity may be analyzed reasonably and surely.

If the terms of sale in an industry are sixty days net this means that the industry sells its merchandise creating a receivable that, according to the sales term, is to be liquidated and paid at the expiration of a sixty-day period. This means under an average method of figuring, that the annual sales, representing six periods of sixty days, will be six times the amount of the receivables. On this basis, if we established a ratio and reduced it to percentages as between the annual sale and the receivables, we would have a ratio of six hundred per cent. This would be the percentage method of indicating that the annual sales would create the receivables at the rate of six times a year which, in contra, would mean that the receivables were collected on an average of sixty days' maturities.

If the sales term were two per cent. off ten days or sixty days net, it may be presumed that a sufficient number of customers will take advantage of the two-per-cent. ten-day discount opportunity so that the total of their accounts being paid within ten days will offset on the average the total of those accounts that run past the final maturity sixty-day dating.

If the terms of sale are ninety days net, or two per cent. ten days, ninety days net and the same proportional study were developed, the ratio of the sales to the receivables should approximate four hundred per cent.

This because of the fact that the receivables would then represent accounts and receivables that did not mature except within a ninety-day period, which is evidently approximately one-fourth of a year so that the sales might normally be expected to be about four times the amount represented on this basis.

If in yearly successive or periodically successive statements we find that the bulk of the receivables is increasing but that the volume of the sales is increasing with sufficient rapidity so that the ratio of sales to receivables is also increasing we may be reasonably confident that the industry is not accumulating old or less liquid receivables. If, in contrast, we find an increasing amount of sales but a decreasing ratio as between sales and receivables we can be moderately certain that the sales terms of the industry have been voluntarily extended or that there is a greater proportion of receivables past due than as measured by the condition at the beginning of the comparison period.

If we are confronted with a declining current ratio but we determine, by the establishment of a ratio measuring sales against receivables, that the actual liquidity of the receivables has increased, this increase may have been sufficient to offset and support the credit standing of the industry as jeopardized by the

declining current ratio. This is true because of the fact that, as we are assured of the freshness and basic goodness of the receivables, it is only logical for the creditor to be willing to continue his credit extensions on a narrower margin.

This is in a manner akin to a study in engineering which determines the load to be carried by a bridge structure, for example, and provides the necessary strength to support the expected load and provide a margin as a factor of safety. In order to make this clearer the writer has at times used a homely simile to emphasize the case. Under this simile a farmer is supposed to have a small creek running through his hay-field difficult of crossing with a loaded hay wagon. The farmer, realizing that he could make this crossing and haul to his barns more easily by the use of a bridge, builds such a bridge. He uses as stringers, two by four timbers upon which he lays the cross planks making the roadway. This bridge carries the farmer and his horses and the empty hay rick successfully to the hay-field. On his return, however, with the loaded wagon, the two by four stringers are not equal to the load and the bridge collapses. Certain of his theory that a bridge can be efficient the farmer decides to build another. Profiting by his experience and realizing that two by four stringers are not of sufficient strength he goes to another extreme. Instead of laying two two by four stringers he lays three two by twelve stringers. This bridge carries the load both to and from the hay-field without trouble. The farmer is satisfied and proud of his effort. Later in discussing this matter with a summer visitor, who happens to be an engineer, he is told that he has been excessively conservative in constructing his bridge in regard to the margin of safety. The engineer has figured the weight of the team, the farmer, the wagon, and the hay load and through his knowledge of the strength of timbers, etc., etc., has

figured out that the farmer could, in perfect safety, have relied upon three two by six stringers. This would mean that in laying the bridge the farmer had used exactly twice as much lumber in his two by twelve's as he needed because two by six's would have given all the necessary strength and would have provided the necessary factor of safety for possible overload. This is, of course, an example of the inefficiency of ignorance.

The suggested ratio of sales to receivables is in a manner similar to the mechanical knowledge of strains and stress which the engineer had in determining the size stringer needed by the farmer to provide the factor of safety. The principle behind the use of this ratio emanates from the thought that the liquidity of the receivables, their freshness and their rate of collection is quite as important as their bulk. This collectivity, indicating the true liquidity of the receivables, can be comparatively measured by keeping a record from year to year or period to period of the proportion that exists between the sales and the receivables.

(The executive of a business can use this ratio as has been explained so as to develop a monthly comparison of his receivables which taken over a period of years will establish the monthly normals of his business. See Chapter III.

Sales to Merchandise Ratio.—The development and use of this ratio is somewhat similar in theory and practise to the ratio just described in connection with the receivables.

If the ratio of sales to merchandise as developed disclosed a percentage of six hundred per cent. it would mean that the sales would, on the average, consume the inventory in sixty days' time. If the ratio is four hundred per cent. the sales will consume the inventory in ninety days' time.

If in the comparison of statements from year to year, or period to period, we discover an increasing inventory there may

be a tendency to the belief that the industry in question may be getting itself into an over-inventoried condition. This, however, can be far better measured and estimated if the mere bulk of the merchandise is not considered as closely as is the relationship of the sales to the merchandise. If the merchandise is increasing but the sales are increasing also, in an amount large enough to increase the ratio of sales to merchandise, then the industry is probably not working into an over-inventoried condition. This would be true because of the fact that the inventory, although larger, is being eaten up and consumed more rapidly and turned more times as between periods than in the former instance.

In every industry there is a period of risk as between the time that inventory, in either the state of raw material for fabrication or finished goods for jobbing or retail sales, is purchased, and the time at which it is disposed of. If, normally, the goods are sold on the average within a period of sixty days, then the industry is under the jeopardy of loss through falling prices for only sixty days after the purchase of goods, because by the end of sixty days the merchandise will have been sold. In a period of rising prices the length of the period of jeopardy is not of such great importance because the element of the risk of loss through declining prices is not present. As we approach the peak of a rising price period, however, particularly if there has been a scramble for merchandise in a seller's market, the period of jeopardy begins to play an important part in the determination of the goodness of the credit risk. If inventory is piled up in sufficient quantity to lengthen the period of risk considerably beyond what may be or has been normal for that particular industry, a condition may develop in which a very considerable part of the assets of the industry may vanish through loss due to falling prices. This particular phase of statement analysis was used by

some and could have been used by many credit men with advantage, as a measure for the statements received during the year 1920, because early in that year it became reasonably evident that we were approaching the peak of high prices and that we were about to enter a period of decline. Under these conditions a lengthened period of jeopardy in inventory became a very serious question in the stability of many industries.

The writer remembers one specific instance in which this particular ratio disclosed a weakness in a particular risk. In this instance the ratio of sales to merchandise was two thousand, four hundred per cent., indicating that the inventory was being consumed every fifteen days or thereabouts, being at the rate of twenty-four times a year. This particular condition suggested the expediency of looking very closely into the inventory. It was discovered that this particular industry, operating in a commodity that was disposed of by wagon sale, actually had on hand only a sufficient amount of raw material to fabricate its product from a period of fifteen or twenty days if further raw material could not be secured. The market was a highly competitive, highly localized one, secured largely by personal solicitation of wagon-men and by judicious advertising. This particular industry was securing its raw material in a market nearly one thousand miles from its point of fabrication. It is true that it had under order and on the way a substantial amount of raw material. This material, however, was subject to freight delays, embargoes, and tie-ups through snow-storms, etc., and it could easily have been physically possible for the delay of raw material on the road to have reached a point where the industry would have been without it and have had to cease fabrication for a period. It might have been able to secure a substitute raw material of doubtful quality which would have resulted in a product

not uniform with that which it generally distributed. Under these conditions it might easily have been possible for the industry to lose a very large part, if not all, of its market. This could have been recovered at a considerable extra selling expense thereby entailing a substantial loss. This is, of course, an exceptional case and is advanced only as an example of the application of this particular ratio. When the situation of the industry was brought to the attention of the management they at once saw the seriousness of the situation. They made arrangements, immediately, for several sources of supply, some of them local and others approximately local, so that material could be secured, on a pinch, at some small additional expense, but still on surer basis. By this they made themselves secure, so that the danger of suspension in production was eliminated.

Another instance exemplifying the use of this ratio was in its application to a comparatively small so-called department store. Over a period of years the statements indicated an ever-increasing inventory accompanied by some increase in sales but by a decrease in the ratio of sales to merchandise. As this was not a sporadic or isolated decrease it was deemed advisable to consult in the store with the management concerning the make-up of the inventory. This consultation disclosed the fact that the merchant in question did not appreciate the necessity of disposing of merchandise at the end of a season, if even at some sacrifice. A good many of the top shelves were filled with boxes and packages of merchandise some of them of the vintage of ten or fifteen years before. Unlike wine, this age had not increased the value of the vintage and the merchant had to take, in the readjustment which was forced upon him, a very considerable loss in disposing of this antiquated inventory. It is true that there would have been perhaps some loss each year on his seasonal

reduction sale, but a reduction sale at the end of any three or six months' season would not have to be so drastic, to move the goods as would a reduction sale of goods from four to six years of age, in which many models and many styles were worth practically nothing but junk value.

The condition above outlined was emphasized and made prominent by the application of this ratio to this particular statement. It is not, of course, impossible that this condition might have been discovered by the generally inspirational method of comparative analysis. But the necessity of this kind of an investigation was positively suggested by the establishment of the ratio as between sales and inventory.

As was said concerning the receivables, a more liquid condition of inventory may help to sustain a falling current ratio or a less liquid condition of inventory may detract from a rising current ratio. This condition of basic liquidity is a most important fact and the comparative liquidity from year to year or period to period can in a very great measure be determined by the development of this ratio.

Sales to Net Worth Ratio.—In order to earn profit wealth, as represented by capital invested by owners in a business, must be reasonably active. The activity of the money invested by the owners of a business can be measured to a very great extent by the relationship borne by sales to the net worth. With a given percentage of profit, figured in establishing a sales price, the greater the profits will be on a fixed capital or net worth investment for each increasing amount of annual sales. If we therefore establish the ratio of sales to net worth we can determine the activity of the owners' invested capital. If this ratio is an increasing ratio the activity of these funds is greater and with the same margin of profit the earnings should be greater.

There are, however, conditions in the use of this ratio that ought to be borne in mind. As in the human body there is a normal temperature, so in an industry there should be a normal activity of invested net worth. If this activity is excessively high we may be confronted with a condition in which the owners of an industry are over-aggressive and are developing sales activity in excess of all that may be reasonable when considered in proportion to the amount which they have themselves invested and provided as a margin between the assets and the debts. Such a condition may be likened to an individual running a fever. Under these conditions an abnormal activity may be supported primarily upon the momentum of the business and this momentum may carry the industry into a dangerous position in which it becomes over-expanded when compared to its invested funds. If this over-expansion becomes excessive and there is any setback in general conditions it may put the business in real jeopardy, as a chill may be fatal to an individual with fever.

Some old-established business lacking progressive management may not keep their funds actively employed. This inactivity may be sufficient to run the industry into what has been called a condition of dry rot. This dry rot condition is often indicated by a continual year by year or period by period falling off in the ratio that exists between sales and net worth.

In the use of these velocity ratios it must be borne in mind that many regular increases or decreases are to be looked for under normal conditions. The increases and decreases in the ratio may not be sharply defined. The dangers lie in the continued and steady adverse developments of the ratios and, while a one- or two-year variation adversely may be explained by general conditions, a continued variation toward weakness should be very skeptically viewed by the credit grantor.

Ratio of Sales to Fixed or Non-Current Assets.—It is, of course, a perfectly evident matter that the owners of a business, to a greater or less extent, invest their capital in plant, real estate, machinery fixtures, etc., etc., so that they will be in a position to fabricate a product which they can sell.

In the generally accepted method of statement analysis the credit judgment has rested largely on the current assets and their proportion to the current debt. Only a very secondary value has been attached to the non-current assets, although the possession of efficient non-current assets is an absolute essential to fabrication. This suggests the desirability of establishing a method by which the relative productivity of the non-current assets may be gaged so that from year to year or from period to period an increasing or a decreasing productivity and efficiency may be noted and compared.

If we should establish a relationship as between sales and non-current assets, reducing this to a percentage basis, we would have an indicator showing the resultant dollars of sales for every dollar invested in non-current assets. This would establish the sales productivity for every dollar non-currently invested. A comparison of this ratio from year to year would indicate the relative activity of the non-current assets and would establish a productive valuation that would place the non-current assets in a much better position to be used as a basis for credit standing.

There is, however, a very considerable allowance that must be made in the use of this particular ratio. In a period of rising prices, prices on product sold would tend to show a very rapid increase in sales as reported in dollars. In contra to this the amount of dollars invested in plant would not advance in the same rapidity because of the fact that accumulation of plant dollars extends over a considerable period of years and any yearly

addition thereto at a higher price would have a very much relatively smaller influence upon the average cost and investment in the non-current assets. Along the same line of reasoning in a period of rapidly falling prices the sales volume, as expressed in dollars, would decrease with a considerably greater rapidity than would the dollar valuation of the non-current assets. Therefore, in reading this ratio, in a comparative way from year to year or from period to period, the general economic condition must be very carefully considered, as rising or falling general prices would affect this ratio.

The ideal method, of course, would be to measure the tonnage production against the investment in non-current assets,—to indicate whether or not the tons or yards per unit or per dollar invested showed an increase or a decrease. The individual executive in measuring his own business might very possibly make such a study, but it has not been common practise to submit tonnage volume of sales in rendering financial statements. This, however, is a condition that should develop and eventually the tonnage output ought to be used in conjunction with the dollars of sales to establish this and other comparisons on a more scientific basis.

METHOD FOR DEVELOPING RATIOS

Dividing total sales by total receivables produces the sales to receivables ratio. This should be carried out to at least two decimals and multiplied by one hundred to reduce the ratio to percentages.

Dividing total sales by merchandise inventory gives the sales to merchandise ratio. This should be carried out to at least two decimals and multiplied by one hundred.

Dividing the total sales by the net worth gives the sales to worth ratio. This should be carried out to at least two decimals and multiplied by one hundred to reduce the ratio to percentages.

Dividing the total sales by the fixed or non-current assets gives the sales to fixed ratio. This should be carried out to at least two decimals and multiplied by one hundred to reduce the ratio to percentages.

USING THE RATIOS IN COMBINATION

The individual ratios, which have been discussed under the heading of static and velocity, are important and instructive as indicating the flux as between different parts of the financial statement, etc. Certain combinations of ratios, when used together, amplify this study and throw into still greater relief certain phases of the company's advancement or decline in strength. These combinations in ratio study are subconsciously performed by practically all credit men, as is the actual ratio itself, and the reduction of this method to the mathematical formula of the ratio and the comparison of one ratio with the same ratio on a preceding statement is merely a modification of the subconscious or inspirational method of reading the statement.

If, as between two years or two periods, we find that the ratio of sales to receivables has remained approximately the same and that the ratio of sales to merchandise has shown a considerable decline and that the ratio of receivables to merchandise has also shown a considerable decline, we may infer and check up this inference by conversation and examination that the company has been increasing its merchandise account on perhaps a speculative basis. The theory behind this suggestion lies in the fact that the same sales to receivables ratio indicates a continuation of the normal in collections, but the other ratio indicates that it has not maintained its normal merchandise turnover suggesting first of all, that merchandise is catching up with sales. The fact that this apparent slowing up of merchandising ability has produced a larger proportion of merchandise as compared to receivables,

indicated by the receivables to merchandise ratio, is a further check and suggestion toward the development of the opinion that the company is approaching an over-inventoried condition.

With a normal increase of merchandise and a maintenance of the ratio as between sales and merchandise and a falling ratio as between sales and receivables we may expect to find an increase in the receivables to merchandise ratio, and this entire combination may indicate a laxity in the collection methods of the company or an extension of the sales term period.

If we are confronted with a bulk increase in sales, a bulk increase in net worth, but a decline in the ratio as between net worth and non-current assets, we may begin to feel that the increased sales have been achieved by plant expansion. Whether this plant expansion is reasonable or economic may be further analyzed by taking into consideration the ratio of sales to non-current assets. If, in spite of the fact that the sales have increased in volume, the relationship as between sales and non-current assets has declined, we may reasonably assume that the productivity of the non-current assets has fallen off indicating that capital, already invested in non-current assets, has not maintained its productivity. If, therefore, we are confronted with a situation in which the ratio of net worth to non-current assets is declining, indicating a greater proportional investment in non-current assets, and if the ratio of sales to non-current assets is declining then it is only logical to suppose that the problem of that industry is not to increase its sales by plant enlargement but to increase its sales by greater plant efficiency. There can be little excuse for the physical enlargement of plant in order to produce a bigger volume if the unit efficiency of plant is falling. If such a development is carried on and we enter into a period of depression it can easily happen that such an industry will find itself top-heavy with plant investment. It will then suffer all of

the credit and financial troubles that are brought about by the conversion of liquid capital into fixed capital that is not, and can not be, proportionally as productive as it should be.

As a supplementary study to this conversion of liquid into fixed capital it is interesting to determine by the study of debt to worth ratio as to whether or not this illogical plant expansion has been accomplished through the medium of capital loaned to the business by its creditors. If this be the case, it is well to use the supplementary study so as to determine whether this loaned capital is in the form of current or funded debt.

Other combined uses of the ratio will undoubtedly suggest themselves to the credit mind. These adaptations of the general principles will of course vary according to the requirements of different industries. There is one thing, however, that the writer wishes to emphasize particularly, and that is that no method of analysis, no development of ratios, can be designed which will make a yardstick for credit. It is not possible to devise a mathematical formula, into which the financial statement can be inserted, that will produce a result that is an absolute measure of increased or decreased strength. All of these analytical points are suggestive and create a background against which may be pinned the financial analysis. All of which leads to the discussion with the individual management of their problems, as displayed by the statement, in order to extract from the management an explanation of their policies and their reasons for engaging in the different plans that have brought about the dislocations that are evidenced. In many instances what might be technically called an adverse development of a ratio might be a temporary matter based on sound judgment for future production and it is in the determination of the soundness of the plans that the credit grantor decides whether or not the business is going ahead or backward.

CHAPTER X

Type Analysis and an Application of the Law of Averages

The analysis of any statement as we have so far discussed it, has been an individual matter, comparing the different portions of the statement, as to any particular year or period, with a preceding year or period, noticing the changes in bulk by the comparative method and noticing the changes in proportion by the internal analysis or ratio method. The ratio method of analysis is advanced as a suggestion as to how to advance from the old-fashioned standard of the credit, based upon the one ratio of current assets to current liabilities, which ordinary comparative bulk analysis has developed. It has been indicated that reliance upon this one ratio alone is unscientific. Especially is this true if the two hundred per cent. proportion is uniformly demanded. There is a definite reason for the necessity of enlarging on this individual ratio test; a very definite reason why some other method should be adopted.

Varying kinds of business develop in their very essentials different basic proportions. Varying kinds of business likewise demand different margins or factors of safety, the degree of risk being different for different general types of business.

Probably this thought can be more clearly emphasized if a comparative discussion is made an example.

If we may, let us take without suggesting criticism, the millinery business as a type, and compare it with the wholesale hardware business as another type. In the millinery business

style plays a very important part in the value of the merchandise inventory. While it may be extreme, it is conceivable that the style for ladies' hats and trimmings in ladies' hats may be a brilliant red to-day. This would mean that, in order to meet the market, the millinery concerns would have to carry red as the predominating color in their inventories both in shapes and in trimmings. This would be true because style has set a demand for red hats. If we are to take an exaggerated case in which, for some reason or other the dictates of fashion change, and the dictates of fashion can change very rapidly, it might become the style for ladies to wear as hats, steel gray in color. This demand for another color might come almost over night. If the mandates of fashion were strong enough it would be almost impossible to dispose of the red hat inventory because of the fact that it would be difficult, even by a process of dyeing, almost impossible to rejuvenate the red stock so that it could be sold as steel gray. Such changes are of course temperamental, but such temperamental changes can occur in certain lines of industry.

The writer remembers well a style for elbow length black kid gloves that developed with great rapidity, not many years ago. This demand was so great and its coming so sudden that there was a real shortage in gloves of this kind in a very short time. He also remembers merchants finally getting heavily stocked in this very same elbow length black kid glove just in time to catch a change in style that made them somewhat of a drug on the market. This is to a minor degree what he means by style playing havoc in inventories.

If in antithesis to these types we are to consider the wholesale hardware business we will find that it is pretty certain that a ten-penny nail to-day will perform the same function six months or a year or even two years hence. A monkey wrench,

although there may be improvements or some changes, will still unbolt a nut as easily six months or a year from to-day as it will to-day. There is an absence of temperamental value in the inventory when compared to the millinery business.

With these differences, more or less marked in degree as between industries, it seems absurd to accept blindly any set percentage as a proper percentage for any ratio to be applied generally to all the statements of all industries. There is a sharp differentiation between types of business which should call for variations in proportions and in factors of safety.

In addition to the temperamental differences and the rapid or slow fluctuations in basic value in inventories, we are also confronted with the very great difference in sales terms as between industries. Some industries have adopted and developed the practise of selling on thirty days net. In others it is two per cent. discount for cash within ten days or thirty or sixty or ninety days net. Some industries may sell on four months' terms and as we get into the foreign markets we may find industries selling on even longer terms.

We also find cases where postponed dates are granted and then liberal terms. In passing, the fact that commitments for future delivery do not always appear on the statement should be emphasized. The wary credit man will look out for such possible commitments and analyze their effect on the statement.

Variation in sales terms, even where lived up to, actually makes a vast difference in the amount of business that will have to be carried as accounts receivable and the lengthening out of the sales terms will make a different strain in the borrowing that will be required in order to finance these accounts. They will also affect materially, the proportions as between inventory and accounts. Many other matters of a secondary nature while rea-

sonably uniform within an industry will sharply differentiate that industry from other industries.

This suggests the necessity for studying business not alone by individual comparison with successive statements of the same separate industry, but for the study of the proportions individually in comparison with typical figures of the entire industry. By this it is meant that to understand whether or not the figures of an individual business demonstrate a normal or average condition it is essential to establish, from the study of a large number of statements of that particular industry, what the normal or average proportion actually is. From such a study it is possible to develop for the credit grantor what the proportions are from an actual standpoint. For each credit man to do this would require a considerable and a keen credit application, perhaps beyond the time allowable in the ordinary pressure of business in most cases. It is, however, possible to prepare a study indicating what the actual figures from a whole industry demonstrate the condition actually to be and to establish thereby a reasonable normal.

GEOGRAPHIC AND ECONOMIC VARIATIONS

It has been argued above that it is not correct or good judgment to accept any set ratio and to use it as a standard for all types of statements. This is not carrying the analysis of conditions sufficiently far. A differentiation was made as between the millinery business and the wholesale hardware business and the temperamental characteristics indicated the advisability of different proportions as the credit standing measure basis for the two different industries. The logic of this seems rather elemental and hardly possible of controversy.

But while it would not be logical to prepare what might be a

typical set or a normal set of figures for the hardware business and use it for a measure or a background in analyzing a millinery statement it is hardly any more logical to establish a universal figure, even within a line of business and attempt to use it as a measure against which to estimate the condition of individual industries in different parts of the country.

The problem of transportation, in the securing of raw material for merchandise in Texas, is quite different from acquiring the same identical merchandise in New England or Oregon. Likewise, the method of delivery of merchandise in a closely populated territory within a short radius from the point of distribution may be quite different from the problem of distributing the same merchandise in a sparsely settled territory in which the radius of destination from the source of supply is considerably larger. These different transportation problems in themselves will have a material effect in the time of delivery and in the consequent size of the inventory, the arrival of the inventory at the selling point, etc., etc.

Likewise the difference in economic conditions and the types of industry centered in a locality, etc., will have a very considerable bearing upon the sales methods, collection methods, etc., in different parts of the country. The condition of the labor market, contentration or de-centralization in population, the catering to factory trade or to society customers, etc., etc., will likewise very easily affect the requirements for maintaining a proper inventory and determining what the proper inventory is and at the same time will vitally affect collection periods.

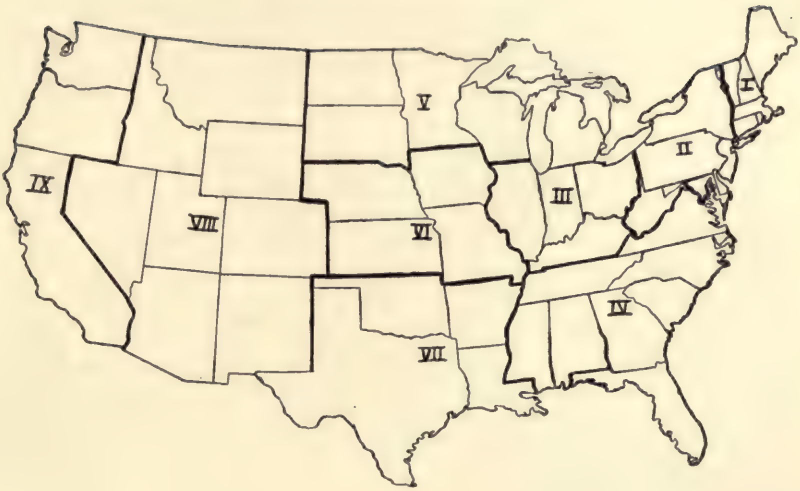
Likewise, territories in which sales terms have to be regulated by crop conditions and times of maturity of crops, etc., will very vitally affect business methods in some of the basic principles controlling sales terms and inventory requirements. Such things

as too great rainfall or absence of sufficient moisture in the effect that these conditions will have on crops and ability of payment will locally affect conditions that would not be evidenced in figures for the country at large.

All of this suggests that in the normal figures used in the preparation of an indicator or measure concerning what is and what is not normal in different lines of business, should be subdivided on a sectional basis so that normals for different localities may likewise be developed. The actual method of developing these normal figures is a process of business statistics that in itself comprises a sufficiently complicated and detailed matter to make it advisable to discuss it in a separate and distinct chapter.

In the investigations which the writer has conducted he has established an artificial division of the country based on his own judgment of reasonable combinations of states so as to provide sectional territories sufficiently compact or sufficiently similar so that the compilation of local figures within these sectional lines may produce normals that will be worth while and against which individual statements may be estimated. These divisions, while perhaps subject to alteration in different lines of trade, are sufficiently general that they have, by themselves, indicated fluctuations of proportions when studies have been made by groups of statements within them. The sections are as indicated on the accompanying map.

Based on an analysis of nearly one thousand statements, approximating December 31, 1918, the writer prepared a report, covering this theory, for the Federal Reserve Board. While the proportions then existing are of course now out of date they might be of interest from an historical standpoint. Together with the argument they were published in the March, 1919, *Bulletin of the Federal Reserve Board.*



AN INCIDENTAL TEST

A testing of this theory of statement analysis was made possible shortly after this report had been compiled. As it substantiates the theory in the mind of the writer and because it was an actual case the main points may be worth repeating in the shape of a story. The line of business, etc., is of course not given nor the name of the company or even its location for perfectly obvious reasons.

A request for a checking on a local name was received by the author from a fellow bank man. This was not a customer name and no file worth mentioning was in the department. As the inquiry was from a personal friend who operated under a code of ethics, mentioned at another place in this book, the author felt inclined to make more than the ordinary effort in developing a satisfactory supply. He therefore telephoned the executive head of that particular business and asked for a copy of the latest statement. He explained that he wanted to use the figures in preparing a report on the standing of the house in support of the name

in the open market. The executive said he would gladly furnish figures and did better than this by bringing them into the office himself.

As originally presented these figures did not include the item of sales. The executive was a bit charry about giving out these sales figures saying it was contrary to the policy of his business. He asked, however, how they were to be used. The writer then, to make a convert to this type of analysis, took a sufficient amount of time to explain the meaning and development of the various ratios. The executive, being interested and curious, offered to submit his figures on sales if he could see the full results of the analysis.

The whole of the eight ratios were then developed, after making the original spread on the comparative bulk analysis sheet. These indicated a mixed condition. The important ratios, analyzed in their relation to the normals indicated:

1. Current Ratio—Somewhat but not alarmingly low
2. Receivables—Merchandise—Very low
3. Sales to Receivables—Somewhat higher than the normal
4. Sales to Merchandise—Considerably below the normal
5. Sales to Worth—About normal
6. Debt to Worth—High
7. Worth to Fixed—About normal
8. Sales to Fixed Assets—About normal

The Current Ratio (1) and the Debt to Worth Ratio (6) while out of line were not so greatly dislocated as to invite more than a passing criticism and would probably have gone by but for other exceptions.

The Sales to Worth (5), Net Worth to Fixed (7) and Sales to Fixed Assets (8) were about normal and therefore drew little attention. The Sales to Receivables (3) was quite a little above normal, suggesting short terms and prompt collections. In fact this was so good as to be retroactive in the analysis of the whole condition.

The criticism focused at once on the ratio of Sales to Merchandise (4) which was considerably below normal. This superabundance of inventory, this indicated, was further suggested by the low ratio of Receivables to Merchandise (2). The writer formed the opinion that the higher debt and lower current ratio were related to a greater than normal amount of inventory. He further decided that the dislocation was not more apparent because sales terms had in some way been shortened and the normal period of carrying accounts lessened to a considerable extent thereby. This, if true, would tend to offset the condition created by the larger inventory by removing, to a certain extent, the usual borrowing necessary to carry accounts. This would reduce current assets and debts on an equal proportion and tend to raise the ratio.

As a result of the whole condition the writer formed the opinion that the subject was speculating in inventory and suggested this to the executive. This accusation was promptly denied. But some judicious questioning brought out the fact that there had been such speculation. The executive admitted that in certain articles he had expected a severe shortage, due to government demands for war purposes. Based on this opinion he had purchased and had in stock enough merchandise for two and in some instances two and a half years' normal sale consumption. He further stated that he was cashing in on this judgment, and was making a very substantial extra profit.

As a result of this analysis and the final full and frank explanation the name was checked as good but with this reservation, that the company had a tendency to speculate in its inventory. At that time the name was good because the executives had guessed correctly. But at any future time a creditor would have to be fully informed concerning the then condition of the

inventory in its relation to normality and the condition of the market. Such a company might easily get into a position of jeopardy in a period of falling prices, so that the general condition of the times plays an important part in analyzing such a risk.

The current ratio method of analysis would not have disclosed this condition, at least not with the clarity and distinctiveness that the multiple ratio method did.

WHAT IS MERCHANDISE SPECULATION?

Speculation in inventory consists in the purchasing of such a quantity of merchandise as will not be consumed by normal sales within a reasonable period. In staple lines this may be one year. In special lines this may be a selling season of six or even three months. When it becomes necessary to exceed the normal period to dispose of the stock then the merchant is abnormally subject to the jeopardy of falling prices and is in reality speculating for a rise. If a fall in price occurs he suffers a bad loss, which may be disastrous.

CHAPTER XI

Construction of a Barometric

A barometric represents in this discussion not an ideal figure for any one of the several ratios. It is a figure that may be developed, under the theory of the law of averages, representing not the arithmetical average of the different items under consideration, but a more normal average or rather a normal point of concentration for any one of the various ratios. Such a barometric must be a figure that will be accommodated to different lines or types of business as advanced in the discussion on Type Analysis. A comparison as between the barometrics, so far produced, for different types of business as a matter of actual fact does disclose considerable variation in one or more of the ratios for the different lines of business. The ratio in which there is the least variation and the closest approximation by each individual statement to the normal is the current ratio. This closer approximation is undoubtedly due to the fact that the two for one current ratio standard developed in bulk or comparative statement analysis has been something aimed at to the neglect of the other and much less non-used ratios. The fact that this particular ratio has been more or less forced into a normality, approximating two hundred per cent., is an argument in favor of the fact that the determination and adoption by any considerable proportion of credit grantors of a standard will compel debtors to regulate their affairs so that their figures will approximate the demands deemed normal to the establishment of good credit standing.

The barometric must also accommodate itself to sectional variations within types of business as has been discussed under the heading of Type Analysis. The writer has, to his own satisfaction at least, demonstrated that there is a variation in proportions in sections or on a sectional basis within a certain line of business. The first public announcement of the theories of this type of analysis and the argument in favor of a proportion of a barometric appeared in the report, mentioned in a previous chapter, prepared by the writer under the heading "Credit Barometrics" for the Federal Reserve Board at Washington and published in detail together with the tables, as the study at that time disclosed them to be, in the *Federal Reserve Bulletin for March, 1919,* beginning page 229 of that bulletin. This study covered an examination of 981 statements in a very considerable group of industries and was worked out on a national and a sectional basis. The tables indicated beyond a question that varying proportions were present not only as between industries but as between sections.

The barometric study should in itself be comparative so that the ratios developed for types of industry and for sections may be compared in successive years or periods and thereby indicate tendencies in whole lines of business both national and by sections. This kind of study will indicate the variations as between periods and at present can normally be developed only on a yearly basis. As we began to approach the peak of high prices it became somewhat prevalent for credit grantors to secure semi-annual statements from debtors and it is not at all unlikely that, as the developments of the method of keeping a running inventory progress, these semi-annual statements will become much more prevalent. If this ever achieves the distinction of being a common practise barometrics will be possible of development on a semi-annual basis.

While the development of a series of barometric studies is primarily the function of some centrally organized office which has access to a large variety of statements from a large variety of lines, still it is possible for the individual credit man selling only one line of trade, if his field of action be large enough, to establish his own independent barometric on his own customers. Even if the volume of statements which comes to his desk is not sufficient to develop a stabilized barometric the combination study along barometric lines will do very much to illuminate him concerning the trend of his customers as a whole and to determine whether or not the individual is following the same trend.

PRELIMINARY PROCESSES IN DEVELOPING A BAROMETRIC

The first part of the mechanical process in developing a barometric is to secure a proper form from which to make the compilation. This consists, first of all, in designing a form to which the individual statement may be transferred in the essential items that are necessary to prepare the ratios which have been discussed. This is necessary for the sake of uniformity. The various individual statements are often reproduced in widely varying forms. In preparing the material for his report to the Federal Reserve Board and in his subsequent activities in this field, the writer has used a form similar to that reproduced on page 182.

This form carries, first of all, the name of the subject. Then the business and the state in which the debtor is located. As a memorandum for the compiling of the barometric a place is left for the geographic section in which the debtor is located and a code notation of the type of business. These last two notations are entered by numerical code and are placed upon the card so as to facilitate sorting, both as to type of business and as to location

within section. Following these, are various columns in which the date of the statement is entered, the total of the current assets, the total of the current liabilities, the total debt which includes both current and funded debt, the total of the accounts and bills receivable, the total of the merchandise inventory, the

-3-

Name State Section

Business Type

DATE	Current Assets	Current Liabilities	Total Debt	Acc'ts and Bills Receivable	Mdse.	Non-Current Assets	Net Worth	Sales
	000	000	000	000	000	000	000	

total of the non-current assets, the total of the net worth, and the annual sales. With the entering of these amounts upon this individual slip the process of compilation begins.

The first operation is to reduce each statement to the eight ratios as described in the chapters on static and velocity ratios. This can be done by one of several methods. The division necessary to determine the ratio may be done by ordinary long division. It may be done by the use of a logarithm table supplemented for convenience by the use of a special sheet for the figuring of the logarithm, etc., as per the sample herewith printed. It may be figured by the use of a slide rule or it may be figured by the use of one of several varieties of computing machines.

The following sheet will be found of considerable assistance if using a logarithm table. The numbers will be placed in the spaces under each heading. The logarithms in the second column

Current Ratio					
Rec.—Mdse.					
Worth—Fixed Assets					
Sales—Rec.					
Sales—Mdse.					
Sales—Worth					
Debt—Worth					

and the result in the third column. This sheet is designed to be used with a seven place table.

The time consumed in this operation, to figure all eight ratios, should be about seven minutes by logarithm, three and one-half minutes by computing machine, less than two minutes by slide rule and considerably longer by long division. The writer has regularly used logarithms and computing machine. Either of these methods can be taught to a reasonably intelligent clerk or stenographer in less than half an hour and such clerk should be able to reach the speed mentioned within a period of two weeks. The use of the logarithm tables was more closely explained in his book, *The Banker's Credit Manual.* Any instructor in mathematics, or engineer, can explain the use of this table completely for this purpose in a few moments.

The result of these computations is entered on the back of this sheet as indicated by the following scale, under successive dates.

Current Ratio	Date	Date	Date
Rec.-Mdse.	....	....	....
Worth-Fixed	....	....	....
Sales-Rec.	....	....	....
Sales-Mdse.	....	....	....
Sales-Worth	....	....	....
Debt-Worth	....	....	....
Sales-Fixed	....	....	....

Having prepared our basic information in this manner the actual determination of the point of location of the barometric may be begun. In order to do this satisfactorily it is advisable to secure a columnar sheet such as is sometimes used for a trial balance book, although the loose sheet is better than the bound volume, and to designate at the top of the columns reasonable variations as between percentages. A separate sheet is, of course, used for each ratio. A reduced copy of this sheet as used by the writer in his experiments is herewith reproduced. (Page 187.)

It should be noted in this connection that the first column of the sheet covering the current ratio is headed one hundred and twenty per cent., that the second column is headed one hundred and thirty per cent., the third one hundred and forty per cent. and so on up to the maximum adopted in the general study. This is a division of ten per cent. as between columns.

On the receivables to merchandise ratio the first column is headed ten per cent., the second, twenty, and the divisions as represented by the columns running up to the maximum ratio splits at every ten points. In the ratio of worth to fixed assets the divisions are made at fifty-point intervals. The same applies to the sales ratio in each instance. The ratio of debt to net worth is divided in the columns at twenty-point intervals. If enough statements are available smaller variations in columns are advisable. The specimen sheets herewith reproduced in miniature display how these divisions would look on a columnar sheet.

The next process is to take the computation sheets upon which the actual ratios have been entered for the individual statements and to enter the figures for each ratio under the column on the particular sheet within which they would logically fall. This means, for example, that every current ratio in excess of two hundred per cent. and below two hundred and ten per cent. should be entered in the column headed two hundred. Every current ratio in excess of two hundred and ten per cent. and below two hundred and thirty per cent. should be entered in the column headed two hundred and twenty. The same reasoning follows for all of the ratios on every sheet. When these ratios have been thus entered the sheets will indicate a more or less concentration and it is with this concentration that we are particularly interested in the establishment of a normal.

The writer has generally considered, in connection with the

current ratio, that a ratio below one hundred and twenty per cent. or above three hundred per cent. indicated an excessively abnormal condition and all statements falling either above or below these amounts have had their ratios entered under a column headed abnormal. The establishment of the abnormal proportion is a matter of choice and discretion to some extent. In the receivables to merchandise ratio the range was from twenty per cent. to one hundred; in worth to fixed from two hundred to seven hundred; in sales and receivables from four hundred to one thousand; in sales to merchandise from two hundred to six hundred; in sales to worth from one hundred and fifty to five hundred; in debt to worth from twenty to one hundred.

For clarity's sake a full set of these sheets is offered as a sample. The figures are the result of an analysis of actual statements and the arrival at the barometric figure is therefore exactly as developed by the writer in his regular course of analysis. To a greater or less extent this work is still in the experimental stage and the whole process has been labeled credit chemistry because it is a first attempt to take apart the component parts of the financial statements and establish the normality of their relations with one another. As more statements come within the field of this development it will become increasingly possible to establish more accurate barometrics covering more lines of business. So far the work has been experimental and while strongly indicative is not as yet completely comprehensive.

CURRENT RATIO

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y
Low	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	High
			146	159	161	179	183	194	205	212	222	236	243	259	261	271	282	292	302	314	322	337	348	710
			149	156	168	177	183	199	206	217	229	235	245	251	260	272	288	296	306	313		331		407
			144	153	162	171	183	199	209	210	226	234	242	256		270	283	290		318		331		437
			144	155	162	179	187	197	205	217	228	236		258		276		295						360
			144	159	169	178	189	196	209	217	220	233		259										466
			144		165	179	187	196	204	218	226	230		254										408
					163	170	188	193	200	219	221	235		259										499
					168	174	183	191	205	212	226	238		258										777
					165	173	180	190	210*		229	231												359
							182	192	201		226													418
							185	199	208		225													368
							186		207		225													431
							185		202		220													376
							181		203															
							189		201															
									208															
									201															
									209															
									205															
									201															

CURRENT RATIO

After the figures have been entered on the assembly sheet it becomes fairly evident that the greatest concentration of ratios centers in the column headed 200.—If we take the average of this column we get a mode. The average is.. 205

The middle figure, taking all the ratios into consideration including the high column, would be the medium. This figure will add weight for the number of statements that show abnormally high, or low, because its location be raised or lowered in the scale of the active ratios depending as to whether or not the mass of abnormal figures falls in the high or low margin. In this study the median is the 76th ratio in point of size and is marked on the scale by a star.............. 210.

There is a considerable grouping of ratios in the columns from 210 to 250. Normally a considerable number of statements may be expected then to fall in this column. To give proper weight to this expectancy it becomes proper to take an average of these figures representing as they do approximately 35 per cent. of the whole group. This average has been labeled the High Average and equals.............. 232.

There is a similar grouping between the columns 140 and 190. These figures represent something more than a third of all the test figures and so any normal should be weighed so as to be accommodated to include them. The average of these columns is called Low Average and is in percentage equal to .... 175.

Total.................. 822
Average................ 205.

The average of these four figures is used as a barometric. It gives equal weight to the point of concentration, the high average, the low average and the median figure, which in itself accommodates itself to the number of abnormally high or low ratios that are evidently so abnormal.

In using this scale then we should secure the current ratio of the individual statement. If it is approximately 205 per cent. then that statement may be considered reasonably normal in this

particular ratio. If above this amount it is proportionally stronger in the current ratio aspect. If it falls below 205 per cent. and as it approaches 175 per cent., or falls below it, it should be viewed with suspicion as being weaker than normal and the other element of the risk must assume a more important part and be stronger than normal to sustain the strength of the credit.

RECEIVABLES TO MERCHANDISE RATIO

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
Low	20	30	40	50	60	70	80	90	100	110	120	130	140	High
18	29	36	40	58	62	78	81	91	107	113	124		148	200
20	25	35	45	52	65	70	82	99	101	116	124			740
11	28	39	46	53	66	75	81	95	106	119	125			183
	27	31	43	59	64	71	84	96	104	112	126			155
	23	31	45	51	66	73	89	91	106	114	122			500
		33	40	56	64	77	87	91	101	111				180
		32	43	55	63	73	86	91		118				157
		31	45	54	62	72	83							
		32	43	51	68	74	82							
		36	45	55	62*	75								
		38	45	59	60	70								
		36	40	52	68	77								
		32	46	59	68	79								
		38	49	51	69	76								
		37	49	53	66	77								
		35	48	58	65	76								
		39	45	56	63									
		38	47	56	64									
		37	46	59	61									
			40		68									
			45		65									
			41		69									
			40		60									
			48											
			46											

RECEIVABLES TO MERCHANDISE RATIO

The reasoning in the choice of the various elements to establish the barometric are the same in this instance as in that of the current ratio. Hence the same detailed explanation is not necessary. The various items will therefore be simply listed.

The Mode, ave. of col. d	44
The Median, marked with a star	62
The High average, cols. e to l—ave.	78
The Low Average, cols. b to c—ave.	33
Total	217
Ave., used as Barometric	54

WORTH TO FIXED ASSETS RATIO

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v
100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	High
103	187	242	269	307	398	437	484	509	594	613	671	716	779	846	869	917	978		1057	1120	1700
143	197	211	281	336	363	411	490	520	572	607	678	716	778	828		933			1060	1135	1450
	164	220	285	344	355	426	466	534	558	620	694	725	784	830		924				1117	1250
	175	234	292	341	373	442	476	545	561	635	662	714									5925
	173			302	358	428	472	512	591		698	725									1019
				331	398	414	464	513	560		688	729									1126
				334	377	401	462	503	551		693	748									1469
				319	354	403	450	548*	550		652	748									1029
				321	377	437	488	527			660	743									3600
				325	387	412		538													10236
				323	380	441		539													1333
				329		420		513													2962
				308		417		513													1411
				322				503													6875
				301				542													1689
				315				537													7133
				336																	9550
																					4411
																					3111
																					1878
																					1906
																					1738
																					1230
																					1384
																					1153

WORTH TO FIXED ASSETS

The same method maintains:

The Mode, ave. col. e.............................323
The Median, marked with a star...................548
The High Ave., cols. f to o......................550
The Low Ave., cols. a to d.......................212

Total 1633
Ave. 408

DEBT TO NET WORTH RATIO

a	b	c	d	e	f	g	h	i	j	k
Low	20	40	60	80	90	100	120	140	160	180
12	20	56	75	87	96	111	131	143	173	
16	21	42	61	81	90	109	125	152	163	
13	21	42	76	84	99	115	124	159	170	
17	23	51	67	84	97	107		154		
13	39	56	70	86	96	109		155		
	27	57	79	83	93	107		140		
	27	48	63	82	92	114		154		
	22	42	62	82	99	111				
	32	52	66	80	91	101				
	36	57	62	84	96	112				
	28	51	76	80	90	110				
	29	43	73	82	99	109				
	22	55	66	88	92	104				
	33	59	72	84	97	105				
	38	48	62	81	97	109				
		59	79	86	95	104				
		59	71	86	93	111				
		52	79	87	94	109				
		48	71		94					
		46	76*		97					
		45	78		92					
		50	62							
		59	74							
		57	64							
		44	65							
		59	66							
		47	75							
		45	78							
		43	71							
		53	64							
		52	64							
		52								
		46								

DEBT TO NET WORTH

The same reasoning maintains.

The Mode, ave. col. c 51
The Median, marked with a star 76
The High Ave. cols. d to g 87
The Low Ave. col. b 28

Total 242
Average 61

SALES TO RECEIVABLES RATIO

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y
Low	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	High
358		472	510	560	649	661	740	799	837	885	916	982*	1045	1088	1125	1186		1288	1349	1390	1411	1462	1515	1864
339			542	599	606	680	737	750	837	879	930	990	1047	1051	1137	1195		1252	1318	1355	1443	1474	1514	1637
				555	638	695	723	761	804	860	937	986	1042	1092	1131	1163		1280	1300	1355		1494	1539	1659
				555	607	650	725	788	826	857	911	996	1047	1068	1132	1160		1273		1398		1489		3713
					630	667	739	750	818	890	945	991	1043	1059	1144	1178		1270		1359		1468		1600
					626	661	734	762	820	875		976	1030	1085	1103	1197				1389		1451		
					616	691	705	757	838	863		990	1040	1075	1128									
					648				802	879		964	1025	1071	1109									
					620				803	860		996	1043		1105									
					607					887			1029		1166									
										896			1041											

SALES TO RECEIVABLES RATIO

In the figuring of the normal or barometric for this ratio a somewhat different method must, in this special instance, be employed. There is no distinct concentration that would give a mode even if several columns were combined. There are several points of concentration, all approximately equal. Therefore the mode has been omitted as not deducible. Otherwise the process is retained.

The Median, marked with a star.......................... 982
The High Ave., cols. l to u..........................1118
The Low Ave., cols. e to k.......................... 739

Total 2839
Ave. 946

SALES TO MERCHANDISE RATIO

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
Low	300	350	400	450	500	550	600	650	700	750	800	900	1000	High
280	308	376	418	498	516	575	513	694	733	758	820	921	1010	1145
	337	389	444	472	504	552	634	694	729	763	841	923	1030	1113
	314	397	416	468	533	563	612	674	712	772	817	948	1040	1181
	346	389	427	459	508	575	614	658	710	768	841	926	1000	1305
	343	398	441	491	504*	552	630	655	710	788	820	941		1311
		387	439	481	539	593	600	669	702	754		932		1370
		391	412	473	517	591		675	725	787				
		389	444	464	535	558		665	717	796				
		393	412	478	525	560		650	733					
			439	454	533	593		677						
			401	450	523	574								
			438	498	529	563								
			432	452	531	546								
				461	516	578								
				478	506	563								
				484	512	564								
				450	513	592								
				452	533									
				486	529									
				474										
				478										

SALES TO MERCHANDISE RATIO

While there are several columns of almost equal concentration, still this concentration decreases regularly from the largest (e), to the smallest (g), of the three that are approximately the same. Hence the regular method is pursued as in the first ratios.

The Mode, ave. col. e.......................... 471
The Median, marked with a star.................. 504
The High Ave., cols. f to m..................... 655
The Low Ave., cols. b to d...................... 397

Total 2027
Ave. 507

SALES TO NET WORTH RATIO

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
Low	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	High
139	229	254	324	380	446	483	528	584	602	655	749	769	841	883	943	999		1115
167	222	258	333	399	447	458	504	581	633	674	704	789	800		900			
158		273	301	380	432	453	501	568	629	685	735	764						
192		258	348	383	416	488	517	575	642	667	743	772						
			310	377	418	472	543	566	610			769						
			334	353	422	470	529	570	620									
			332	356	412	498	510*	585	613									
			311	370	419	453	542	591	604									
			342	351	402	492	506	586	638									
				356	404	465	531	599	607									
				371	410	484	524	573	638									
					426	482	525	567	643									
						494	542	586	613									
						461	517	583	635									
						461	539	585	607									
						487	537	555										
						495	529	590										
						473	534	579										
						497	518	561										
						488	509	584										
						470												
						464												

SALES TO NET WORTH RATIO

In concentration this ratio is almost similar to the preceding (sales to merchandise). in the equality of concentration shown by several columns. But due to the weighting effect of the several items used to establish the normal, the column of deepest concentration is figured for the mode.

The Mode, col. g....................477
The Median, marked with a star........510
The High Ave., cols. h to m...........558
The Low Ave., cols. c to f.............364

Total 1909
Ave. 477

CHAPTER XII

A Critical Analysis

An example of the ratio method of statement analysis is perhaps the best method of emphasizing the internal or ratio method of statement analysis. We can not do this on the basis of the barometric figures because such figures as far as they have so far been prepared, are not yet open for public display. Perhaps for the purpose of our present work this is just as well for the method can be applied quite as well to a single company in the examination of its statement over a number of years. The fact that no comparison to barometric figures will be made will then limit our deductions to what can be shown within the affairs of one concern by reading its statement closely and carefully.

This chapter and the one following will be fairly short in physical number of words used and space covered, but they are the epitome of the thought and the very brevity is important. This chapter will present an example, in the nature of a series of statements, for a hypothetical name based on an approximately true statement. These will be critically analyzed from the dissection standpoint. The succeeding chapter will take the same statements, or rather the last of the series, and by constructive analysis, based on the same theories of ratio studies, attempt to throw into relief the readjustments necessary to the betterment of the condition and a return to proportions necessary to maintain a proper credit standing and balance. For the sake of brevity dollars and cents have been omitted and the various kinds of assets,

liabilities, etc., reduced to the minimum. The figures in other words have been skeletonized as far as possible to make the mental handling of them as the text is being read easy.

HYPOTHETICAL STATEMENTS

Assets

(000—omitted)

Date	7/31/16	7/31/17	7/31/18	7/31/19	7/31/20
Cash	31	49	32	40	61
Receivables	443	541	726	621	980
Merchandise	425	771	703	861	1354
Government Bonds			10	19	40
Current Assets	899	1361	1471	1541	2435
Fixed Assets	277	281	281	291	334
Total	1176	1642	1752	1832	2769

Liabilities

Bills Payable	300	600	600	650	1000
Accts. Payable	121	217	196	125	525
Taxes, Etc.				31	37
Current Liabilities	421	817	796	806	1562
Mtgs. Etc.	90	90	90	90	90
Total Debt	511	907	886	896	1652
Reserves	8	8	8	10	1
Net Worth	657	727	858	926	1116
Total	1176	1642	1752	1832	2769
Sales	1754	2589	3798	4101	5500

This would be about the display in the case of ordinary comparative analysis with the addition of the current ratio which would ordinarily appear at the bottom together with the sales as a memorandum. Probably the merchandise item would have been divided into the three subdivisions of raw material, semi-finished, and finished goods. The receivables would have been divided into notes receivable and accounts receivable. In the item of fixed assets the various kinds of fixed assets would have been shown

and perhaps other details or subdivision of figures. But for our present use these figures and this grouping are sufficient for our needs.

Before passing to a consideration of the ratio it may be well to note very casually that the net worth shows a very consistent growth. The first period it shows an increase of $70,000, the second period of $131,000, the third period of $78,000, and as between the last two statements, in the fourth period, an increase of $190,000. At first glance we would presume that the subject was making substantial profits and hence must be progressing satisfactorily and if anything becoming a better risk right along. The volume of business transacted is also sharply advancing. The increases in the four periods, between the five statements, being as follows,—$835,000, $719,000, $303,000, $1,399,000. From these figures it seems evident that the company is rapidly expanding its field through increased volume and as this is accompanied by substantial increases in net worth this must have been profitable. We therefore have a first picture seemingly, from the bulk figures, representing a growing concern transacting its business at a substantial profit,—a good risk.

THE RATIOS

Now, therefore, after this cursory bulk test reading let us turn to the closer analysis of the ratio method and see if all is still "well in Denmark." These ratios are the same as just described in the chapters on the Static and Velocity Ratios. As the method of their physical development was there discussed no mention is made of it here and the ratios are simply set down in tabular forms for analytical use. The current ratio was not put before us when we were considering the bulk comparison

because it is also one, perhaps one of the principal ratios, in the ratio method of analysis and is therefore presented here.

HYPOTHETICAL STATEMENT RATIO TABLE

When reduced to the analysis ratio the figures just given produce the following sets of ratios, expressed in percentages.

Date	7/31/16	7/31/17	7/31/18	7/31/19	7/31/20
Current Ratio	213.53	166.58	184.79	191.19	155.88
Receivables to Merchandise	104.23	70.16	103.26	72.12	72.37
Worth to Fixed Assets	237.18	258.71	305.33	318.21	334.13
Sales to Receivables	395.93	478.55	523.14	660.38	561.22
Sales to Merchandise	412.70	335.79	540.25	476.30	406.20
Sales to Net Worth	266.97	356.12	442.65	442.86	492.83
Debt to Net Worth	77.77	124.75	103.26	96.76	148.02
Sales to Fixed Assets	633.21	921.35	1351.60	1409.27	1646.70

Lacking a barometric or normal figure for this particular type of business, another study can be made that will be indicative of the progress or retrogression of the business. This we might call a stabilized set of ratios averaging the ratios above shown. The process would be to add the current ratio, for example, for 7-31-16 and 7-31-17, divide by two and get the average. In 1918 one would add 7-31-16, 7-31-17, 7-31-18 and divide by three. In 1919 add four sets and divide by four, and in 1920 by five. Such a table would give an average over a series of years and create a stable or averaged set of ratios. This table would show as follows:

Date of Cumulative Av.	7/31/17 (2)	7/31/18 (3)	7/31/19 (4)	7/31/20 (5)
Current Ratio	190.05	188.30	189.02	182.39
Receivable to Merchandise	87.19	92.55	87.44	84.43
Worth to Fixed Assets	247.94	267.07	279.85	290.71
Sales to Receivables	437.24	465.87	514.50	523.84
Sales to Merchandise	374.24	429.58	441.26	434.25
Sales to Net Worth	311.54	355.24	377.15	400.28
Debt to Net Worth	101.26	101.92	100.63	110.11
Sales to Fixed Assets	777.28	968.72	1078.85	1192.42

While this second table is not perhaps a vital necessity, it is illuminating in that the ratios do not fluctuate so rapidly as over

a short period. One dislocated condition changes the average but the longer the period the less would one year's variation affect the average. The effect is one of stabilization in the ratios and produces a background of considerable value in a close analysis from the deeper standpoint. It is not suggested that this table be set up for every name, but it is suggested that it can well be used to measure up a risk that is in question. It is perhaps of greater value in the constructive analysis that will be the subject of our next chapter. It is introduced here so that all the tables in connection with this example may be together.

THE CRITICAL ANALYSIS

The first point that will be noted in this analysis of this statement is the low current ratio. This is because most credit analysts are trained in the use of this ratio and look first to it. It is undoubtedly true that the current ratio has fallen mightily as between the last two statements and that it is well below the accepted two hundred per cent. standard so generally accepted as a final measure. The trouble is, however, that while this is a condition indicating dislocation its acceptance does not disclose the causes and the other underlying difficulties and troubles.

That this change for the worse in the current ratio is basic is evidenced by the receivables to merchandise ratio which is approximately even with the same ratio of the next to the last statement. This indicates that the fall in the current ratio was not due to a return to a more basic condition, more nearly approaching cost and eliminating the profits discussed in the development of this theory as handled in the chapter on Static Ratios. Receivables and merchandise are in about the same proportion and hence have increased along parallel lines. There is as big a proportion of profits figures on the assets side of the statement

as in the preceding year, hence this fall was not due to the greater elimination of profits in the ratio in proportion to cost items as would have been the case if the amount of receivables had declined in its proportion to merchandise. This suggests that there is a fundamental trouble present and not simply one of form. Of course the thing to do is to carry the analysis further and endeavor to locate this trouble.

The fact that the debt ratio has shown a tremendous increase over fifty per cent., indicates that the company has had to borrow much more heavily than usual. There can only be one logical reason for this and that lies in the proportional liquidity of its current assets. If the assets, called liquid, had been truly as liquid in the last period as in the period next before the last, the liquidity would have sustained the business and hence provided it largely with funds and kept down the increased borrowing. The company has gone on increasing the volume of its business, raising it from $4,101,000 to $5,500,000, an increase of $1,399,000 or roughly thirty per cent. To do this it has had to place itself in a position where its creditors have advanced $148.02 to be used by the business for every $100.00 represented by stockholders' funds. Thus out of $248.02 of funds being used $148.02 or approximately sixty per cent. is owned, controlled and regulated by its creditors. They are nearly fifty per cent. more interested in the success of the venture than the owners as in an absolute failure they, as a class will lose $48.02 more than the owners of the assets proved worthless. Moreover this debt ratio is very greatly in excess of the cumulative average of 110.11 per cent. besides being far larger than any individual year for the five-year period.

We also find this supposition of undue expansion further emphasized by the steady increase in the relation of sales to net

worth. This ratio has jumped fifty points or nearly twelve per cent. in the past year and is 92.55 points higher than the cumulative average of this ratio which stands at 400.28 per cent. This might indicate, and in the mind of the writer would indicate, that the company was afflicted with the disease of over-optimism and expansion, without due regard to true economic proportions. The condition, reduced thus by ratios to a study of proportions, looks like one in which salesmanship may have run away from executive poise and volume have become the key-word in the plan of operation. Volume is a good thing if kept within bounds but volume at the sacrifice of liquidity and proportion can be a serious drawback. The difference between the assets and the liabilities is the margin for shrinkage in liquidation that protects the creditors. Greatly increased volume can only be sustained economically and justly if the margin remains somewhere intact and proportionate. We have seen that the debt ratio, measuring this relation of creditor's risk to the margin, has not remained in proportion. Therefore this expansion policy can only be justified if the liquidity of the assets is strictly maintained. If this increased activity is secured by an inordinate use of borrowed funds, the protection of the creditor rests in the maintenance of a high degree of liquidity.

We turn, therefore, to the ratios testing the liquidity of the main current assets, the ratio of sales to receivables and the ratio of sales to merchandise. These should be separately considered to see if their liquidity is high, because it would be paradoxical to have it so with a high debt, and still if it should be so this might vitiate the criticism so far developed.

A study of the sales to receivables ratio indicates that during the first four statements, there was a steadily rising liquidity in the receivables. This increase was marked as of 7/31/19

reaching a figure that indicated sales of more than $660.00 for every $100.00 outstanding on the statement date. But this increasing liquidity has been arrested and on 7/31/20 the sales amounted to only $561.22 for every $100.00 in outstandings. This is a decrease of about $99.00 in volume for every $100.00 outstanding or about one whole collection annually. This is a very marked slowing up and a comparative loss in liquidity.

It is true that the liquidity ratio of sales to receivables is still above the average for the five statements, but it is not even approximately as high above the average as it was on 7/31/19. The following comparison is illuminating in this connection.

Sales to Receivables Ratio	7/31/19	7/31/20
Individual Statement	660.38%	561.22%
Cumulative Average	514.50%	523.84%
Margin	145.88%	37.38%

Decrease in margin as of 7/31/20 108.50 points or approximately 75 per cent. of the margin of 7/31/19.

The important thing to consider then is that as between 7/31/19 and 7/31/20 there has been a marked falling off in the liquidity of the receivables when measured in their proportion to the volume of business. This means that there should have been less receivables at the statement date to maintain the proportion. This in turn means that the increase in amount, in dollars, of the receivables has been greater than it should be. This increase has been from $621,000 to $980,000 or $359,000. The inference is clear,—of the receivables there must be a considerable amount that is slow, frozen if you will, and not a liquid asset in the true and immediate sense of the word.

This condition is the more serious if we take into consideration the condition of the times at the first part of 1920. Any student of economics, as applied practically to business, must have

known that we were at least rapidly reaching the crisis of the turning point of high prices. The readjustment period was so plainly in sight that the danger signals were all set and the warning posted. Therefore any decrease in liquidity should have been jealously guarded against. An excuse may be offered that this condition was not realized until the time the statement was compiled. This may be so, but if the monthly study of sales and receivables had been kept as suggested in another chapter in this work, the dislocation would have been noticed earlier.

The second item whose liquidity is of the primest importance is the merchandise inventory item. Even in the bulk analysis it seems large, being almost sixty per cent. greater than the preceding year. Its bulk alone has the look of topheaviness. But the underlying weakness of the situation is far clearer when we examine the sales to merchandise ratio. The percentage here has fallen off very substantially, 70.10 points or 14.71 per cent. of the condition as indicated in 1919.

In spite of this slowing down of inventory turnover the company in question has seen fit to increase its inventory from $861,000 to $1,354,000 or 57.25 per cent. The increase the year before was about half of this amount while the year before that there had been an actual decrease. This present condition looks very much like the disease that developed during the war period and reached its height in the hectic extravagance and foolish buying that resulted from the war wage reckless spending. The scramble for more business, always more business, with a loss of the sense of proportion as to the basis on which that business was being done. The one controlling impulse was, to paraphrase on a Liberty Bond slogan, "Borrow and Sell." "Will-o'-wisp" economics that saw in increased turnovers increased profits, forgetting that all engines should have some safety-valve, have led

many businesses into deep waters. Firm foundations are more lasting than sky-scrapers built of stucco. Firm foundations are correct proportions as between debts and owned capital, merchandise and sales, sales and net worth. When these proportions are dislocated the only remedy is a plaster cast to hold the muscles and ligaments steady until they knit into place again.

SPECIFIC DEDUCTIONS

Current Ratio, Debt Ratio:—The first is too low because the second is too high because the company has tried to do too much business for its own capitalization, relying too greatly on borrowed funds.

Sales to Merchandise Ratio:—The company's position indicates that it did not foresee the jam and buyers' strike and gambled once too often on securing another turnover in the hope of a substantial profit. It is the story of the pitcher and the well. They are caught in a moribund market with a topheavy stock of goods, more than equal to their net worth and turning so slowly as to be dangerous. This slowing up of merchandising became slightly evident in 1919 although not accompanied by the great abnormal debt. The turnover then, while lower than in 1918, was above the average for the four years of 1916, 1917, 1918 and 1919. But the company failed to read the signs and bought more merchandise at the end of a rising price period and was caught in the slack.

Sales to Receivables Ratio:—The very sharp break off in this proportion suggests, when read together with the physical receivables total of $980,000, that there may be considerable amount of notes receivable in the mixture and that these may represent frozen assets in place of liquid. An examination of this in detail would have been suggested to the analyst using this

ratio method. He might have uncovered a nice smug contingent liability in "Notes Receivable Rediscounted." He might have found that the over-optimism of the subject had led into chasing the rainbow of acceptances in international trade. In any event the rigidity expressed in the falling of this ratio emphasizes the current ratio decline, the futility of volume that does not produce cash to pay topheavy debt assumed to create volume that has simply produced a stagnant inventory.

The risk is so evidently muscle-bound in over-inventory, so sluggish of circulation in collection that in a real analysis, in spite of a confident belief in the so-called moral risk, a serious condition presents itself that needs to be faced. The condition is one of serious stagnation and possible dissolution. The other elements, however, on actual past performance may have been good and based on this and by the analytical application of the ratio theories in reconstructive analysis the way out will be planned. But this is a story of optimism and so should go in the next chapter.

CHAPTER XIII

A Constructive Analysis

An analysis that simply tears down to protect a creditor in prompting him to refuse a loan is only half an analysis. The real field of the true credit man is, as has already been said, not only to reject bad loans or credits but to discover necessary readjustments and determine the proper way out of the difficulty. As every correction of a condition may be brought about in several ways no general panacea can be offered for sick credit risks. In this chapter, which must be short in its very essentials, the writer will endeavor to suggest certain ways of considering the figures discussed in the last chapter in the light of readjustment so as to make a presentable showing. Whether this complete readjustment is possible or not is of course a question, but the writer believes that as the extent of the readjustment, suggested as desirable, is approached so will the strength of the risk be improved in about an equal proportion.

The writer is going to assume that the so-called moral risk is satisfactory and that the dislocations appearing in the condition as of 7/31/20 are due to economic rather than ethical causes. The past record of the company will be supposed to show normally sound judgment and a reasonable measuring up to the tests of previous critical conditions.

The condition of tightness in which this subject finds itself has not been brought about by an inordinate tying up of liquid capital in fixed assets. This is clearly shown by the ratio of

worth to fixed assets, which has been a mounting ratio each year. The company has produced more wealth each year, and what is more essential left it in the business, than it has tied up from year to year, in proportion. In 1916 the company had only $237.18 of net worth for every $100.00 of non-current or fixed assets. This means that there was not a large margin for current use after the fixed assets had been paid for from invested funds. This ratio by 1920 had risen to $334.13 of net worth for every $100.00 tied up in fixed or non-current assets. This is an increase of about forty per cent. in this relationship.

Furthermore the money thus invested is economically invested because for every $100.00 so tied up in 1916 the company had sales of $633.21 while in 1920 this had risen to $1,646.70, more than double the old volume proportionally. Therefore the problem must be attacked from a different angle than the possible too great conversion of liquid funds into a fixed form of capital.

Probably most analysts at this point would fall back on the current ratio but the writer for personal variations in method prefers to attack the problem from another angle. The proportion as between the actively used economic capital that is owned and borrowed is to him a more important matter in readjustment than is the current ratio. If one has a bad current ratio but a small proportional debt it should always be a better working out proposition in his opinion. But with an abnormal debt too great a risk is being taken by loaned rather than owned capital. Therefore the writer generally starts his revamping plans based on a study of the debt ratio.

In this particular case the ratio of debt to net worth is 148.02 per cent. indicating $148.02 of debt for every $100.00 of net worth. This is not a normal statement debt for this type of risk. This ratio has had a tendency to be high for this company ever

since the beginning of this study except in 1916 when it was approximately normal, for this kind of business. It has, however, averaged too high and the tendency has been to use far too great a proportion of borrowed money.

THE STATEMENT

The last statement of this company was as follows:

Assets	7/31/20
Cash	$ 61,000
Receivables	980,000
Merchandise	1,354,000
Government Bonds	40,000
Fixed Assets	334,000
Total	$ 2,769,000
Liabilities	**7/31/20**
Bills Payable	$ 1,000,000
Accts. Payable	525,000
Taxes, etc.	37,000
Mtgs., etc.	90,000
Reserves	1,000
Net Worth	$ 1,116,000
Total	$ 2,769,000
Sales	$ 5,500,000

The ratios from this statement are as shown on the following table:

Current Ratio	155.88%
Rec. to Mdse.	72.37%
Worth to Fixed Assets	334.13%
Sales to Receivables	561.22%
Sales to Merchandise	406.20%
Sales to Net Worth	492.83%
Debt to Net Worth	148.02%
Sales to Fixed Assets	1,646.70%

While the average debt to net worth has run as high as 110.11 per cent. a close analysis of the figures indicates that on 7/31/16 with a debt of 77.77 per cent., the company seemed to show a fairly good proportion. Ever since that time it has had a tendency to expand on borrowed money. This internal con-

dition coupled with some idea as to what should be normal suggests to the writer the logic of selecting an eighty per cent. debt as about what might be allowed as a fair proportion of borrowed capital when compared to owned capital. If we admit this as a premise from which to construct this rebuilding we can then figure what debt might be carried without arousing criticism by taking eighty per cent. of the net worth as shown:

Present Net Worth	$1,116,000
Eighty per cent. of Net Worth	892,800

This subtracted from the present debt will give the amount of contraction called for in a readjustment.

Present Debt	$1,652,000
Eighty per cent. Basis	892,800
Suggested Reduction	$ 759,200

There are but two main sources from which funds to effect this reduction may be secured. These are the receivables and the merchandise item. On the statement of 7/31/20 these appeared as follows:

Receivables	$ 980,000
Merchandise	$1,354,000
Total	$2,334,000

If this amount be liquidated so as to produce $759,200 in cash, to be used to liquidate debt, the combined total of these two items would be $1,574,800.

With a total of $1,574,800, as above mentioned, to be divided into receivables and merchandise again we must of course establish a basis for the proportion of each. In the last statement the receivables were 72.37 per cent. of the merchandise. It stands to reason, however, that it would be far more difficult to force a decrease in the receivables than it would be to effect a reduction

in the merchandise. Collection on sharper terms is the only way to effect a reduction in receivables, merchandise however can be sold at a reduction for rapid conversion. Hence it seems only common sense to establish a higher ratio as between receivables and merchandise, as temporarily allowable, and load a greater part of the reduction on the merchandise item than might be normal. For this argument the writer suggests a proportion of eighty per cent. as between receivables and merchandise.

The mathematics of this means that if the receivables are to be eighty per cent. or four-fifths of the merchandise that the total amount of $1,574,800 must be divided into nine parts of which four will be receivables and five parts merchandise. When computed, and dropping parts of thousands, this will result in the following scale.

Receivables on an Approximate Eighty per cent. Basis....	$ 700,000
Merchandise in Same Proportion	874,000
Total Receivables and Merchandise	$1,574,000

With this adjustment and division of the new total we can construct the following two tables:

Present Receivables	$ 980,000
To be Reduced to	700,000
Reduction	280,000
Present Merchandise	$1,354,000
To be Reduced to	874,000
	$ 480,000
Receivables Reduction	$ 280,000
Merchandise Reduction	480,000
	$ 760,000

If this reduction is brought about the statement as of 7/31/20 when reconstructed would read, the cash having been used to retire debt:

Assets	
Cash	$ 61,000
Receivables	700,000
Merchandise	874,000
Bonds	40,000
Current Assets	$1,675,000
Fixed Assets	334,000
Total	$2,009,000
Liabilities	
Bills Payable	$ 500,000
Accts. Payable	265,000
Taxes, etc.	37,000
Current Liabilities	$ 802,000
Mtgs., etc.	90,000
Total Debt	$ 892,000
Reserves	1,000
Net Worth	1,116,000
Total	$2,009,000

On this reconstructed basis the various ratios would be about as follows:

Current Ratio	208.74%
Rec.—Mdse.	80.00%
Worth—Fixed	334.13%
Sales—Rec.	785.71%
Sales to Mdse.	629.29%
Sales—Worth	492.83%
Debt—Worth	80.00%
Sales—Fixed	1,646.70%

CONCLUSIONS

In the chapter on Critical Analysis we concluded that this risk had suffered from an attempt to make one more merchandise turnover and clean up, believing the economic readjustment period further off than it proved to be. Stagnation caught this company with a very much larger inventory than in former years and turning at a reduced speed.

It also caught the company with a piling up amount of receivables. The volume of these suggests that if the monthly

study of collections had been made along lines discussed in the chapter on Collections, this slowing down would have been noticed in time to prevent so large a freezing up of current assets. It would have been far better to keep the merchandise as merchandise, for it is a staple line, than to turn it into frozen receivables. As merchandise it could always be cashed, at a price. As receivables it stays in cold storage until the thaw of reviving business activity melts it out again.

Whether the reconstruction can be brought about on a scale as indicated is a matter of some supposition and question. But as it approaches this readjustment the risk will assume a better aspect. If it can be brought the whole way a good standing will be assured, when coupled with the dynamic side of the risk.

These two short chapters are given to show the analytical and reconstructive use of the ratio system of analysis. The hypothetical case used is suggestive of many industries that have suffered of over-optimism and in several instances this method has led the writer to criticize risks thought good by the older tests in which his judgments were later vindicated by events. The skeletonized use of the ratios here used may be adapted as experience proves proper, but they are better than a reliance upon the one ratio method. Perhaps they may be a little confusing at first but worthy of study, so that their use for analytical and constructive service may be understood.

CHAPTER XIV

A Borrowing Limit

Nearly every bank credit man has had innumerable experiences in which he has been shown a statement and asked how much could be borrowed on its strength. This is of course manifestly an unfair question because no intelligent credit man limits his decision as to the goodness of a loan upon the property statement alone. There are so many other elements entering into the question that many things besides the statement must be examined and thoroughly analyzed and understood. From the bank credit man's standpoint such a question must or should go unanswered, as far as the borrower is concerned. There is another reason for this as well. This is that the business man himself must have some plan of operation and some idea of the borrowing he will need. This more or less definite knowledge or opinion of what credit will be necessary to finance an operation is one of the first indicators that the business executive has studied his own condition and knows something of his probable requirements. The first plan of trying to let the banker decide the maximum without any relation to the plans for production, etc., of the enterprise is either a sign of lack of knowledge or a tendency to leave it to the bank in the hope that a larger line may be granted than the commercial man had dared to hope for and request.

But be this all as it may and be the question as illogical as stated, the condition still exists that the bank man must in some way, for himself, decide how far he would be willing to go on the

facts as represented. In addition to this the commercial executive must have some general plan at least on which to base his request for credit extension. Borrowing and lending can not be the result of blind impulse but must be based on well conceived ideas aiming at logical ends within seemingly safe limits. The fact that economics, either theoretical or applied, is not an exact science can not take away the necessity of approaching the question in as scientific a manner as possible. Forces entirely outside any individual business will, of course, bring about economic variations that will so badly dislocate plans made in advance that it may seem reasonable to omit making them. Undoubtedly the first compass was a thing of many variations. There can be magnetic disturbances to-day both within and without a ship that may make a compass in error. But in spite of mishaps due to error and influence no sane person to-day would urge the return to a method of navigation based upon instinct. It is not enough to follow one's nose, no matter how acute the smelling sense of that nose may be.

There has been too little credit granting that is based in any way on a deep and lasting study so that it approaches a science. Science is defined:—"Knowledge gained and verified by exact observation and correct thinking, especially as methodically formulated and arranged in a rational system." The granting of credit has been far too experimental in its nature. It has been empirical and empirical is defined as—"relying on or guided by experience or observation rather than scientific knowledge." The old credit man or business executive may perhaps rely to a certain degree on intuition but the younger man, not having the many experiences, must perforce attempt to benefit by study and close analysis. At best this analysis and collection of facts and cases will be open to faults, but not having accumulated actual

experiences the younger man must make his plans for future operations painstakingly and in detail. In a like way, the grantor of credit, be he a young man, must gather together as many facts as he can approaching science as nearly as possible in a subject that is not and can not be so accurate in its measure as to be a true science.

In the question then of a maximum borrowing we must view the problem from two standpoints. The first of these is that of the commercial executive and the second is that of the grantor of credit. The necessity for close thinking by both of these classes of men is most forcibly urged by the writer. He also realizes to the full the great danger of making forecasts of economic production, consumption, the balance between and such other forces that must be in and remain in balance to make the working out of any plan of production possible. He urges conservatism in hopes from the commercial man and courage and discretion under economic disturbances on the part of the bank credit grantor. The first to prevent undue optimism leading to an involved condition through thoughtless over-expansion. The second to prevent fearful withdrawals of credit and the consequent wrecking of possible productive enterprises. Both of these are inter-related and equally important.

FROM THE COMMERCIAL EXECUTIVE ANGLE

As has been said before, the owners of any business venture must supply a quantity of capital with which to engage in business. From this supply they first purchase the fabricating assets, such as plant site, buildings, machinery, fixtures, etc., and establish proper insurance relations to cover the danger of loss by fire, accident, etc., by the payment of the necessary insurance premiums. These assets are classified and labeled as fixed, cap-

ital, non-current, and are in their nature productive and potential rather than exchangeable or currently liquidating. Their necessity and value can be measured comparatively in successive periods by methods already explained.

The capital or wealth owned by the interested parties of the venture should be abundantly sufficient, with very few exceptions, to supply the funds to purchase all of this character of assets necessary and in addition thereto to supply certain funds to be used in the liquid or, as it is commonly called the going part of the business. It is really with this latter sort of asset that we are most interested at this time.

A period of production and storing up of goods normally precedes a selling period and collection of accounts. This period demands outlay of cash for purchase of goods, pay-rolls, funds to carry accounts, etc., in excess, sometimes in great excess, of the current funds on hand. Two courses are open. First to purchase supplies, etc., on terms of sufficient length so that they will not have to be paid for until fabricated, sold and paid for, using the owned current funds for pay-roll, etc. If the current funds left after purchasing all the non-current assets are sufficient for pay-roll, carrying needs, etc., this course could be followed. But this is rarely the case. The second method is to borrow the extra needed funds from a banking connection, or connections, or in the open market. This latter method in some phase is the course usually pursued.

The amount of borrowing necessary is a reflex from the relationship that exists as between the sums of money spent monthly on purchase of goods, fabricating cost, carrying of accounts, overhead charges and any other expenses and the income in cash collections from accounts representing receipts from sales. If monthly outlay is greater than income it will soon consume the

surplus liquid capital and create the necessity of borrowing or becoming slow pay. As the period of production advances and prior to the period of collection this condition becomes normally, in a seasonal business, more and more acute and greater and greater borrowings become necessary until the peak of the load is reached.

As we pass from the production period we enter into the selling period and according to the sales terms the strain is carried further along. If goods are sold on sixty-days terms, cash will not be received for the goods until sixty days after the sale. This then extends the time before receipts come in with which debt may be paid by the average length of the actual selling terms. By this is meant the average period in which collections are really made and not the so-called sales terms made as part of the sales agreement. This period will be long or short according to the actual conditions of selling and collections prevailing in different lines of business; and bad debts affect it also.

During the period of production and sale the monthly expenditures are liable to exceed the intake of cash, but after the effect of sale begins to be felt and as the production expense requirements fall off the balance should swing the other way and receipts of cash from payment of accounts should exceed the outlay month by month. With this condition developed the intake exceeds the outlay and each month the merchant comes into possession of the margin or balance in cash which he can use to reduce his loans. This is a regular cycle in a seasonable business and varies in intensity as the business is more or less strictly seasonal. In some industries this is highly so and in others in a much less marked degree.

BORROWINGS OR CAPITAL

Before going on to the development of a principle of practise from the facts and balances mentioned above one other type of business or condition needs proper consideration. This is the business in which seasonal variation has largely vanished either from operation in several lines of overlapping seasons or where extraordinary increases in volume have so increased the need of funds that at no period can the debts be liquidated because the need for current funds is always in excess of the margin existing as between the wealth supplied by the owners and that tied up in fixed assets.

Much has been said about capital loans and the inadvisability of a bank tying up its loanable funds in this kind of an investment. The function of a bank has been to supply temporarily the funds necessary to carry a business through the production and selling peaks as mentioned above. Banks were not, in their theoretical development, expected to be the continued partners in any enterprise by the establishing of an all-year loan. In fact it is often part of the agreement in the establishment of a banking line that the borrower agrees to make a full clean up at least once a year. This is based on the old maxim, "The proof of the pudding lies in the eating thereof." The true proof of real liquidity and a proper commercial credit relation is in the liquidating occasionally of the loans thereof.

In recent years, however, a very considerable number of business ventures have fallen into a specially favored class that at no time liquidates floating indebtedness in its broad aspect. Such operations do, it is true, liquidate individual parts of their debts but this liquidation is more apparent than real because it is accomplished by transferring debt from one creditor to another. It is

a good deal like robbing Peter to pay Paul and no true liquidation has taken place. The creditors as a whole are economically partners in the business in that their credits are in continued use in the operations of the business. They support not only the peak but the valley of the operation and are at all times subject to the jeopardies of the business. It is not sufficient, in theory at least, that some of their number are occasionally paid for a short period because while under this condition Peter may be out of the trouble this time letting Paul carry the load; the next time it may be Peter that is in and Paul out. No one can foretell accurately when the breaking point may come and being in or out with the capital borrower may well be a matter of good fortune rather than foresight.

If the principle of banking, that banking credit is to be used to cross the peak, is correct, then everything below an average peak should be within the field of capital investment and not of bank credit. The minimum funds needed during say a two- or three-months season at the bottom of activity should be provided for by capital investment by the parties most interested in the possible profits, namely the owners of the business. This is more logically true because dividends are paid on capital, as represented by stock ownership, and not on actual capital as sometimes represented by continuously loaned frozen credit. Where more funds are continuously needed than can, at any low point even, be amply provided for by the net worth of the venture then the creditors are being invited to take a capital risk not on the basis of a capital return but on the basis of the from month to month market interest rate. This rarely equals a dividend rate on a successful venture and therefore the return is not sufficient to equalize the risk. This is the more true from the banking angle because not only have credits been loaned for capital risks but those credits

are balanced by a demand liability on the bank's statement in the nature of its customers' deposits that are subject to call payment.

From this the deduction is offered that it is not an economic good for borrowings to be so continuous as to turn credit into fixed capital venture. When a business has grown to such a point that its lowest activity demands more funds than its net worth can provide the time has come for an increase in that net worth either by the addition of new capital or by the conservation of earnings so that by the increment of earnings the net worth will be increased to the amount necessary to support the business at the lowest ebb of its activity.

UNLIKELIHOOD OF COMPLETE LIQUIDATION DEMAND

From the foregoing argument we have evolved an economic theory in the use of credit. In its general application it is sound but there is still another phase that must be considered. This is the extreme improbability that all creditors will need their funds and call for them at once. This is in a very great measure quite similar to the position of a bank in relation to its depositors. Experience has taught us that only a certain percentage of depositors will demand the funds, credited to them, at any one time. This injects a new element into this type of borrowing that is worthy of consideration. It is strictly true that a business of such a type could not actually liquidate its complete current debt except by a shrinking process applied to the volume or size of its ventures. On the other hand it is practically certain that no large percentage of its creditors will simultaneously demand the return of the funds loaned to it. When such a condition can be definitely defined it may be proper for a continuous debt and use of credit to develop.

The necessity then develops of measuring up so as to have

some background against which to measure a concern so as to determine as to whether or not it may logically be placed in this class. As this condition also has an important bearing on the fixing of loan limits we must consider it before going back to the thread of our study.

It would seem that the very first requisite would be that the industry should be engaged in the production of an essential commodity of consumption. The most logical would be the production of foodstuffs where the demand is not only continued but vitally necessary. We must all eat and therefore foodstuffs of a staple kind always have a market in which they can be sold even though some concessions in price must be made. Some other types of goods may approach this, but for the present argument and as a comparative base this is sufficient as a first step.

A second characteristic should be the possession of a wide contact with the consumption market. The basic consideration in this relation is that breadth of market assures a more certain distribution of products and a more certain consumption of the goods. It also eliminates certain dangers of local depressions, local credit disturbances and local extraordinary competition. Therefore breadth of market is most essential.

Breadth of banking connection is also important although perhaps secondarily so. Breadth of banking connection will greatly mitigate if not entirely eliminate pressure against banking lines due to local disturbances. It will also open to the industry the volume of credits in the active territories in which the disposal of the product is most in evidence. It will make possible the presence, in territory of available loanable funds, the free line reserve mentioned in our chapter on commercial paper.

These various conditions, then, and the full trend of thought and analysis they suggest make it possible for us to consider

again the main thread of the argument of this chapter. Variations in the thoughts about to be suggested will have to be made to accommodate them to these underlying basic differences.

ESTIMATING THE NEED FOR CREDIT

The difference between the intake by months from maturing accounts and the outlays for manufacturing and the necessary amounts for holding receivables, must of necessity determine the necessary borrowing. The turning to a condition of greater receipts than outlays will also indicate the period in which loan decrease can be brought about. This is axiomatic in that the principle is so evident that it need not be debated.

Outlay is dependent upon the manufacturing schedule. Any certain schedule of production will call for the purchase, at more or less definite periods, of the necessary raw materials to be used in this schedule. It will regulate pay-roll expense, etc. These facts, base production plans, can be estimated month by month according to the production schedule. This will give an estimated outlay.

Experience can make possible an estimate of the selling campaign and the period of probable sales activity. Coupled with this an analysis of the real selling terms and the collection period will make it possible to estimate the time when collections may be expected. Thus it is possible to estimate the outlay on a production program and the intake from it. This figured month by month will indicate the *expected* strain and no more. Such an estimate can not be made bindingly accurate, but it can do something very definite for the manufacturer. It can show him only too clearly the outlay he must of a surety make if he sticks to a production program. This, if costs are fairly figured, can be made reasonably accurate. The estimate of the intake can not

be so accurate or so safe a figure. This is true because economic conditions may so change that collections will slow up and the intake be cut considerably below expectations. To play safe the outlay should be figured liberally and the intake conservatively and with a wide allowance.

This study can be developed in parallel columns entering the amounts in cumulative shape so that in any month the gross discrepancy can be noted. This discrepancy will have to be accommodated by borrowing in the months when outlay exceeds intake. When the balance changes and intake begins to overtop outlay the borrowing can be liquidated. Such a study will make more reasonable and sure a borrower's request for a loan for he will have formulated some idea of his probable requirements. Also this manner of estimating will serve to check up on whether or not the production plan, if carried out, will produce a condition topheavy in debts. If this be so then it may suggest a revamping of plans on a more conservative basis. (See end of this chapter.)

One word of caution is necessary in the use of such a method. This is against the boastful or unreasoning promises that any set program can be carried through in spite of everything. Economic changes can upset any program in a change of balance as between supply and demand. Therefore such a measure is an estimate and not an accurate measure. It is far better, however, than a hand to mouth, hat in hand policy that means return after return to the banks asking for increases in credit lines. Such a practise leads to distrust on the part of the bank in the sound judgment of the business man and his knowledge of his own needs. A commercial executive should have some pretty definite idea of his needs and maximum requirements. When making request for a credit line he should be able to talk with intelligence about his plans and point out his expected or designed campaign so that a

prospective creditor can see what it is and decide as to whether or not it seems reasonably safe so that he will be willing to take the credit risk.

THE CURRENT RATIO OR DEBT TEST

For the sake of argument only and because it has been more or less a standardized item let us start with a statement that shows

Current Assets	300 units
Current Debt	100 units

and study the matter in the light of the current ratio method on the basis of two for one. These figures show a condition of three for one. If an additional credit of one hundred units were given and the proceeds were used to purchase current assets we would then be confronted with a condition as follows:

Current Assets	400 units
Current Debt	200 units

This would produce the two for one proportion and if this is the measure of goodness and the limit of decline the credit grantor would allow then an increased credit extension of one hundred units would be all that the first example would stand for and still meet up with the standard set and adopted by the creditor credit man.

If the subject example were allowed an amount of two hundred units of credit and this were all invested in current assets the first example would be modified so as to show as follows:

Current Assets	500 units
Current Debt	300 units

This indicates a current ratio of 1.66 or 166.66 per cent. If the credit grantor were satisfied because of the moral risk and

punch in this particular concern to operate on this low a ratio, a loan might be made unless some other offsetting condition were present.

At this point again it should be emphasized that no method of mathematics, accurate or concise analysis, can definitely define credit limits. The so-called moral risk carries too much weight. The writer dislikes the phrase "moral risk." It makes too much of the goody goody who may be moral as can be and lack snap and punch. He calls this phase, for want of a better word, the dynamic part of the risk. It goes without argument that one must be honest to secure credit. No one wants to loan money on credit to a crook. We do not invite thieves to dine with us so they may find out where we keep our silverware, in order to rob us the more easily. But neither do we employ a doctor or hire a mechanic just because he observes the ten commandments. Besides being honest he must avoid being a fool. He must be imbued with what has so feelingly and understandingly been labeled "pep." In addition to this he must have poise, balance and general punch. The term moral risk is a misnomer, but that which has been so labeled is after all an absolute essential to securing credit. And if there be enough of it other rules, measures, standards and the like can go largely by the board and the risk endure and the credit be granted.

The writer, himself, however, does not start with a study of the current ratio. His first inclination is to view the matter from the point of the debt. If, in the first case used a while back, the following condition prevailed, there being no funded debt:

Total Debt	100 units
Net Worth	300 units

we would have a case in which the debt was 33.33 per cent. of the net worth. If from this we go to the second case, after the

extension of another one hundred units of credit our figures would read:

Total Debt	200 units
Net Worth	300 units

On this basis the debt would be 66.66 per cent. of the net worth. Perhaps this might be sufficiently low to be considered reasonably safe, by the writer. If at the same time a current ratio of two hundred per cent. were considered sufficient for this type of loan the line might be deemed reasonable.

If, however, 66.66 per cent. were considered as the limit for debt as safe in this particular type or in this particular case and the following were the figures evidenced by the first considered condition:

Total Debt	100 units
Net Worth	250 units

and we attempted to allow a credit line increase of one hundred units we would find:

Total Debt	200 units
Net Worth	250 units

or a debt of eighty per cent. of the net worth and this would exceed what was deemed reasonable for a total debt, although if we return to the second example, on this section we would find a reasonable current ratio expressed in the following conditions, with the net worth added to the figures:

Current Assets	400 units
Current (also total) Debt	200 units
Net Worth	250 units

In this last case the increase that would occur in the debt ratio placing it beyond what was deemed the reasonable limit would operate first and deny the additional one hundred units of

credit. In other words and epitomizing, we should establish two limits for any risk, allowing for the dynamic factor. We should then consider the proportion in the condition that would exist after any contemplated increase in the credit extension and the first operating limit should control our action. If the reduction of the current ratio to too low a limit is first in evidence it should control. If the increase in the debt to too high a proportion develops first then it should be the deciding factor. The choice of these limiting points must come from experience. This study should include all line accommodation arrangements.

WHEN FUNDED DEBT APPEARS

When part of the total debt is funded a somewhat different problem presents itself. Here payment of principal on part of the debt has been deferred, under normal conditions, for a period. It is logical then in such instances to allow for a higher debt ratio because not all of it is pressing. The limit to be set varies with opinion and experience. On the basis of a 66.66 per cent. debt, where all the debt is current, a debt where part is funded might run safely to eighty or even ninety per cent. This decision can not be a standardized and must result in various departments from local and type experience.

One final thought suggests itself, however, as worthy of consideration by the credit student. If sixty-five per cent. debt, where debt is current, was a limit but with a partly funded debt a limit, and the debt ratio was set at eighty-five per cent., an advance of twenty points, then a supplementary study as between the current debt and the net worth might well be made and this should not be full to the recognized or set limit usually used for the debt ratio limit.

In other words if sixty-five per cent., with all debt current,

were accepted as the limit of the ratio of the debt to net worth, and eighty-five per cent. if the debt were substantially funded then the supplementary ratio of current debt to net worth in this second instance should be perhaps not more than forty-five or fifty per cent. It should be approximately as many points below the normal as the combined debt is allowed to go above the normal, because funding does not entirely relieve the debt of its nature of loaned and not owned capital and because at the end of the funding period refunding may be difficult or impossible thereby creating an unlooked-for strain. A funded debt is a sort of contingent current debt remaining funded and non-current largely under good behavior, economically speaking. The presence, therefore, of a liberal funded debt calls logically for a smaller than normal current debt in its relation to capital funds or net worth.

AN ESTIMATE

The following chart is a rough schedule without departmental refinements indicating

A Outlay:—The monthly estimated total cost of production based on

B Sales:—Which is the selling program or schedule. This also is based on a monthly sale schedule reaching a selling peak or seasonal top and shading off thereafter.

C Collections:—Sales terms are supposed in this case to be sixty days net and so the sales estimates are carried on this record sixty days later than the month of sale. For the example no slow accounts are figured. This would have to be established on the average figures for the business.

D Cash Balance:—The subject starts with ten units of cash. Say $10,000 or other amount. The ten units are for relative study only.

A FUTURITY ESTIMATING SCALE

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Jan.
A Outlay	150	250	400	600	800	1000	900	700	600	400	200	100	6100	
B Sales	200	100	100	50	300	500	2000	1500	1000	500	400	300	6950	
C Estimated Collections	400	300	200	100	100	50	300	500	2000	1500	1000	500	6950	
D Cash Balances	10	260	310	110	60	60	60	60	60	460	360	660		860
E Estimated Collections	400	300	200	100	100	50	300	500	2000	1500	1000	500	6950	
F Potential Cash	410	560	510	210	160	110	360	560	2060	1960	1360	1160		860
G Outlay	150	250	400	600	800	1000	900	700	600	400	200	100	6100	
H Dividends														850
I Balance	260	310	110						1460	1560	1160	1060		10
J Deficit				390	640	890	540	140						
K Monthly Borrowings				450	700	950	600	200					2900	
L Monthly Payments									1000	1200	500	200	2900	
M Cumulative Borrowing Total				450	1150	2100	2700	2900	1900	700	200			
N Net Cash Position				60	60	60	60	60	460	360	660	860		

OPERATION OF CHART

The operating figures for January call for an outlay of 150 units (say $150,000)—A.

The estimated collections due to previous years selling amount to 400 units—C.

There is cash on hand of ten units—D.

To the cash on hand we add the estimated collections securing a potential cash of 410 units—F.

From this potential cash we subtract the estimated outlay and secure the balance I, which in turn is transferred to the cash balance line D under February, giving us 260 units.

February and March are both months in which a residuary balance is left as between the carried over balance plus the receipts minus the outlay.

In April the month starts with a cash balance of 110 units, to which is added collections of 100 units making a potential cash of 210 units. The outlay, however, is 600 units leaving a deficit in actual cash of 390 units—J.

To overcome this, borrowings of 450 units are effected—K—leaving a net cash position of the difference between this and the deficit (K minus J) of sixty units to forward into May as cash balance—D.

After this, for four months there is a monthly deficit in the balance between intake and outlay necessitating increased borrowings. The cumulative effect of this is carried under Cumulative Borrowing Total on line—M.

In September the position reverses itself and intake exceeds outlay resulting in a balance of 1,160 units, shown on line I. A payment is made against the loans, line L, of 1,000 units, leaving the cumulative borrowing total 1,900 units.

This condition of greater intake than outlay continues and by December the loan is completely paid and January shows a cash balance of 860 units from which a dividend, line H, is paid leaving cash balance of ten units.

This exposition is, of course, not a finished accounting method. It is simply suggestive and entirely hypothetical. It is used to show the connection between a selling campaign, a production program and the necessary borrowings. These reach a peak of 2,900 units. By some such plan in which the basic principles are the same a borrowing requirement can be estimated and the emphasis is put on the word estimated. If collections slow up this amount would have to be exceeded and so a substantial margin should be arranged for if the standing of the company will warrant it. Such a credit budget can not be rigid nor exact, but its preparation can be extremely helpful in forecasting probable credit needs.

CHAPTER XV

Commercial Paper

CUSTOMER RELATIONSHIPS

It has become common practise, as between bank and depositor customer, for the depositor to maintain an average balance approximating twenty per cent. of the established line of credit. This balance is not to be computed in its relation to a currently used credit or loan but is based upon the line or maximum promise of banking credit extension. The reason for the establishment of this mutuality of relationship is perhaps somewhat obscure. Some will advance one reason and others another reason to explain the situation. It is, however, undoubtedly basically related to the Siamese connection between loans and deposits that binds the two so closely together that at times it is difficult to determine whether loans create deposits or deposits create loaning ability or loanable funds.

It is true that an original deposit of reserve money, say gold coin, makes it possible for a bank to increase its deposits through credit advances entered as loans and offset by deposits. The reserve money deposited acts as a direct reserve, making possible the maintenance of the legal reserve percentage for the additional deposits. But for the individual bank these deposits are to a more or less degree individually transitory as they are checked against and move on to other banks. In the system as a whole, however, deposits and loans are largely reciprocal of each other

and fluctuate in a great degree along the same up or down curves.

While little publicity and perhaps little thought has been given to the matter it still remains a fact that credit lines in force are far in excess of the credit lines in use. On a basis of demanding a twenty per cent. average balance every account, in the commercial department, drawing no interest or receiving no other special inducement, is a potential background for loan or credit lines of five times the average deposit. Not every checking account has connected with it an already authorized and established line of credit. Not every checking account could demand a line of credit because not every checking account represents a good or satisfactory risk. But the fact remains that there is a potential possibility for such a credit request.

From another point of view it becomes almost absolutely certain that borrowers will not all, at any one time, demand the full use of their granted lines. In fact this condition of non-demand for the use of funds at the same instant by borrowers is very much akin to the well-known fact that depositors will not all draw on their accounts at once and demand immediate payment. In one as in the other there is a balance of existence and use that in the case of deposits has made it possible for banks to invest their funds in notes, running to a definite future maturity, bonds and sundry such investments. It has been found safe and feasible to carry on a banking business with actual cash or demand reserves running from twenty-five per cent. down the scale to a much less amount.

The relationship between established lines of credit and the amount of those lines in actual use at any one instant of time is, in the opinion of the writer, a very similar situation to the relation between demand deposits and the amount that will be with-

drawn by demand at any one moment or during any one banking day. It is not a customary practise for banks continually to establish the percentage of total lines granted that are in actual use. As a matter of personal curiosity, the writer in several instances totaled the amount of the granted lines of credit, under his observation, at several different times and compared this total with the loans actually extended to such customers at the same time. While the relationship varied in the several experiments the lines of credit were from three to five times the actual loans. This can mean only one thing, and that is that the bank has ethically obligated itself to be in a position to extend considerable additional credit, over and above the amount being used, just as it is legally bound to pay demand deposits at once. That practise has demonstrated that while a wise selection of risks and allowance for seasonal variations among requirements will eliminate almost certainly any danger that this difficult position will develop, it does not relieve the bank from its responsibility of having loanable funds any more than it is relieved by experience from keeping itself in an approximate position of being able to pay deposits on demand.

The argument so far has been entered into to establish a premise. If the bank must maintain a reasonable reserve so as to be in a position to meet such deposit demands as will arise from day to day, then from a standpoint of mere logic it is just as proper that the borrower maintain, with the bank, a proportion of loanable fund creating deposits so that credit will be available to meet unused line demands when they arise. In either case, the reserve against deposits or the average deposit for credit lines granted is a kind of insurance against the contingent demand for fulfilment of contract. In the case of deposit reserve the proposition is set and regulated by law. In the estab-

lishment of a proportion as between credit lines and average balances custom and experience have set the proportions. Both cases are similar in their relative aspects, only the boot is on a different foot and by such an arrangement both feet are decently shod and banker and customer are both protected and both protect and assist each other in maintaining their positions and filling their contracts.

NON-CUSTOMER RELATIONS

Demands for credit are in a large measure seasonal. This seasonal demand is not uniform throughout the country. This means that the individual bank has peaks and valleys in its credit demands. There will be times when it has excess loanable funds and may be in this position for a considerable period. The bank that has made a study of its credit system knows when these demands for credit on the part of its customers will come with a fair degree of accuracy. It naturally wishes to be prepared for this peak load of credit demand and quite as naturally it wishes to employ its funds productively in the periods of slack customer demand for credit. This induces a condition of willingness on the part of the bank to seek temporary investments upon a non-customer basis. With this condition outlined it becomes expedient to turn for a moment to another phase of the question.

As seasons vary in different parts of the country so do the demands for credit vary. Money demand to move the crops follows the natural seasons. Production peaks in manufacturing, predating the selling seasons, vary in their needs for funds to be used in fabrication and also in the needs of manufacturers to add to their stock against the selling season. Then too, after the selling season has started the merchant or manufacturer must carry his customer according to the sales terms until the time of

payment. From this complexity of variations in money demand it is quite possible for whole sections to be using the loanable funds of the banks of that section to the full while in other sections there may be a surplus of loanable funds. This is a second condition in the consideration of our main question of the subject of credit in this chapter.

It is also possible, and in very many instances an absolute fact, that banks in a great measure specialize in certain lines of business. There are banks that make a specialty of catering to the dry-goods industry, the automobile industry, the milling interests, etc., ad infinitum. As demands for funds in these industries are often very seasonable it is possible for banks in the same territory or even the same city to be widely differentiated in their use of the loanable funds at their disposal. One bank having a set of manufacturers whose season for production is advancing but not culminated may be loaned to the limit to meet the demands of its customers. Another bank, even just across the street, may have a set of customers who have advanced in their season to the point where their own customers have largely paid them and therefore they may have practically paid out their own loans. The first bank is striving to meet the demands on it for funds and the second is looking for temporary safe investments for the funds piling up in it. As banks are diversifying the lines they deal with this sharp distinction is somewhat disappearing but it can and in some instances does remain. This is a third condition in the study between supply and demand for loanable funds.

The above mentioned conditions have brought about a situation whereby the development of the instrument known as commercial paper has been possible of development in this country. We speak of commercial paper in an entirely different

meaning from that used in Continental Europe. It does not necessarily mean the bills receivable of an organization endorsed by them or sold in the market or hypothecated to their banks. It more generally means the straight note of a corporation that is issued to place it in funds and that is disposed of not to its banks of deposit but to such banks as are in funds and are looking for investment by brokers who specialize in maintaining connections with the borrowing markets in which funds are easy. The fact that credit stringencies vary in different parts of the country or as between different banks due to local or seasonal, or type stress has made it possible for a considerable number of brokers to specialize in the maintenance of local offices in various parts of the country thereby keeping in touch with such banks as are in funds looking for temporary investment. Commercial paper notes are normally issued for a maturity of six months from the day of making. They are bought by banks temporarily in funds with the idea of taking on a temporary loan without any deposit or connection and without any consequent necessity of renewals in order to maintain the depositor relationship. This kind of paper is bought at a period in which the bank has excess loanable funds, to employ these funds until such a period as the bank has found to be a period in which their customers begin to use their credit lines more generally and at which time it becomes essential to them to have loans running off so as to release bank funds for customer use. The analysis by a bank of its own position and its customers' needs which we have already spoken of emphasizes and throws into sharp relief these periods so that a bank can determine, fairly accurately, at what time in the future it will be necessary for it to have loans, self-liquidating, running off so as to place it in funds, and it buys commercial paper that coincides in its maturity with this period.

The foregoing discussion has been entered into to make perfectly clear one definite condition in connection with commercial paper. In a depositor relationship a line of credit is established and the customer has the distinct satisfaction and knowledge that at any time, during the life of this line of credit, he may discount with his bank the notes of his organization in a loan equal to the total of the line granted. It is generally understood that at some period of the year this line will be entirely or practically entirely liquidated, but it does not mean that each note will have to be met absolutely at maturity as payment or part payment can be made not only in cash but in renewal notes keeping the loan alive within reasonable bounds. This condition, however, does not maintain as regards commercial paper sold in the open market. This paper is bought by a bank with the distinct expectation of absolute payment at maturity. If the maker of the note is not in a position to liquidate his loans entirely at the maturity of each note he must not expect the purchasing bank to take a renewal but such renewal notes as he must issue will have to be sold again by his broker and the proceeds used to meet the notes held by purchasing banks. If, upon consultation of the broker, the banker continues the loan by the repurchase of a second note that is entirely a matter of the bank's decision and its own cash position. It is not a matter of negotiation between the maker of the note and the bank except in a case of inability to make payment and credit dissolution.

This condition has two distinct points of interest to the commercial house. The first is that in their financing they must make definite arrangements so that they will be able either through the cooperation of their brokers or through the accumulation of funds through their operations to take up the notes sold in the open market as they mature without any possibility of

negotiating with the bank holding them as they might with their banks of deposit. The second point of interest is that funds thus secured do not carry with them any deposit balance requirement and that therefore a house borrowing this way in the open market is not compelled to maintain twenty per cent. balances directly with the banks that may hold their paper. In these aspects credit received by the sale of commercial paper differs from credit received by an issue of a line of credit and while at the first analysis it may not seem a particularly important differentiation it has, nevertheless, a very considerable effect on borrowing policies.

The fact that commercial paper must be paid at maturity produces the necessity on the part of the borrower of establishing his financial arrangements in such a way as to be in funds without question or to be in credit without question at the maturity of his commercial paper so that he may be able to take it up. This means that bank lines of credit ought to be kept open and unused while commercial paper is being floated in order that, if there is any miscarriage in figuring, the bank lines can be used to take up the slack that may exist between the outstanding commercial paper and the market for the resale of a second issue where payment can not be effected, actual collections not providing the cash. In other words, a manufacturer who is using his bank line of credit to the full is not in a position to issue commercial paper that would be attractive to the bank credit man or that would be economic for him from his own standpoint. Open bank lines with commercial paper in the market are the insurance and the factor of safety against possible continuance of the total amount of credit being floated, when liquidation is not possible, and the commercial paper market goes dead.

This takes us back to the relationship that exists between

the depositor-borrower and his bank in connection with his average balances. The balance which he carries under an understanding that he is to have a line of credit of five times the amount of his average balance is an insurance and is really in the nature of an insurance premium that, if the necessity arises to use the line, it will be available for him and it is pretty cheap insurance at that.

THE COMMERCIAL PAPER BROKER

From the standpoint of the commercial manager the choice of his commercial paper broker is of the utmost importance. While it would be impossible to classify the best commercial paper brokers in the order of their standing because of the fact that personality enters too largely into this proposition, it is nevertheless pretty evident that there are personal likes and prejudices for or against different commercial paper brokers on the part of a great many bank credit men who purchase paper. The policies of different commercial paper houses appeal to or grate on the credit judgments of the bank credit men who buy the paper. It is, therefore, of the utmost importance that before establishing a connection with a commercial paper broker that the commercial executive be moderately certain that the broker with whom he is negotiating is in a standing with the bank buyers of paper that will insure an access to the market. This information can be secured in one of two ways, in the opinion of the writer. First, the commercial executive can inquire from a number of representative banks as to their opinion concerning the breadth of the market with which the broker in question is in touch. It would not be out of the way to interview the bank of deposit and ask them their opinion of the prospective broker. If the bank of deposit had had no experience with commercial paper buying or with the broker in question their credit department would be in a

position to secure information and to give advice on this particular point. A second way would be to have the broker indicate to the possible client their contact points, in the nature of their local representatives in different sections of the country and give some indication of the banks to whom they had sold commercial paper in fairly reasonable amounts. This could be checked up by the commercial executive either directly or through his bank and the authenticity of these statements could be established. It is important to secure a broker that will have as wide a distribution as possible if borrowings are to be considerable, because the wider the organization and the greater the number of contact points the more rapidly the broker will be able to dispose of a block of paper and the more willing he will be to accommodate the borrower.

There is a fairly well defined feeling among a considerable number of bank credit men that they prefer to buy paper only from brokers who themselves buy it direct from customer and who do not handle it on a commission basis. The writer himself belongs to this group. There are two reasons for his attitude in this connection. The first is the more important. This particular reason hinges upon the fact that a broker buying paper and owning it until he has disposed of it is under the risk of personal loss in case of failure. It is the writer's belief that a broker who is under this jeopardy will maintain a better credit department himself, will submit his risks to a more searching analysis and will, therefore, handle a better class paper than a broker who has only a commission interest in the risk and assumes no period of jeopardy himself. The second broker, so it seems to the writer, would be more interested in his volume of business and his commission basis thereon rather than in the basic goodness of the risk. The second point of consideration is that the bank buys generally on a ten-day option. This means that the paper is

purchased from the broker and that the banker is allowed a ten-day period to make an examination and to determine whether or not he will retain the paper or whether he will return it to the broker. During this period, the bank practically has the endorsement or guarantee of the commercial paper broker on the name. Consequently this means that for ten days when purchasing from a substantial and strong paper broker the banker has an additional factor of safety in the name. If the paper matures in sixty days this means that for one-sixth of the period the bank has an endorsement. If the paper matures in one hundred and eighty days it means that for one-eighteenth of the period or about six per cent. of the time the banker has this guarantee of the broker. While this is only a small fraction of the time, on a considerable amount of paper and satisfactory buyings, it will give a substantial proportion of secured or two-name paper if the broker is good. It is, of course, a very secondary consideration, but in the minds of some credit men it does exist as an additional point to consider when buying paper.

The type of broker from whom paper is to be bought is also of importance because in times of stringency or in times of individual difficulty the temper of the broker plays an important part. As there are fair weather bankers so there are fair weather brokers. If a commercial house is hooked up with a broker that has solicited their business in a period in which paper is scarce and the market wide, and has induced the executive to arrange his financing on a basis of liberal open market borrowings it may be very embarrassing to an executive, if with a narrowing of the market and an increasing supply of paper the broker declines the name or will not handle it further. It is also possible with brokers, as with bankers, that at the first sign of any possible question they refuse to continue any credit relations with

the customer. Fundamentally good names in a pinch or credit crisis could be broken by brokers who, not being able to sell the entire block of paper made and not being in a position to carry it themselves, discontinue their lines. There are brokers who have carried names through periods themselves not wishing to offer the name in the market and subject it to outside analysis and criticism because they had confidence in the final outcome and the final goodness and market of the paper. This makes it important for the commercial executive to consider the character, temper and backbone of his commercial paper broker.

DEPOSITOR AND OPEN MARKET BORROWERS

It is the practise to maintain a certain proportion as between the average balance and an established line as has already been discussed. It has been mentioned that lines of credit ought not to be used while borrowing in the open market. The question as to when to use the open market or banks of deposits for borrowing is a matter of fine distinction. Bank credit men with whom rests the market for commercial paper have different standards. Some will not buy names in which the net worth is less than one-fourth of a million dollars. Others will not buy names in which the sales are less than half a million. The writer is not cognizant as to any standardization as to size and personally has not felt himself bound by size in the choice of such names as he would buy. To him, it has seemed that the basic individual goodness of the risk was most important in the matter. However, there is this thing to consider. A small company in which the total borrowings can be handled by its bank of deposit, well within their legal loaning limit to an individual name, has no real economic need of the open market. When a company grows beyond the loaning legal limit of its one bank of deposit it may

secure additional funds by establishing two banking connections or even three, four, or more. The question then becomes one of finance as to the economy of establishing continually increasing banking connections with their necessary deposit relations in order to accumulate a sufficient volume of borrowing ability.

While there is no standardization, as to where the choice of bank lines or entering the open market has been developed, it is the opinion of the writer that the proposition as between a reasonable debt at the peak of the company's operations and its net worth should determine the limit of its borrowings and when this limit is considerably in excess of what can be granted by two or three banks of deposit of reasonable size, the time has come to enter the open market. This would rarely happen with concerns in which the operations would be less than sales of at least five hundred thousand dollars a year or a net worth of less than perhaps two hundred thousand or two hundred and fifty thousand dollars. While no hard and fast rule has been established by the writer for his own practise, it is only in exceptional instances that he has considered small names as a proper investment for funds in the purchase of commercial paper.

THE USE OF FUNDS FROM COMMERCIAL PAPER SALE

In this country we have developed a trade discount method in which the goods are sold on definite datings with the credit terms running for a definite period and in many instances a discount for cash within ten days or some such period. This discount for cash is a very much discussed question. In some instances it is considered a tax on the man who must purchase on full terms and others consider it a bonus for prompt payment. However this may be, and wherever the equity of the development of these terms exists as a practical problem, it becomes

important for a commercial house to discount its bills as these discounts for its first profits. This is a perfectly logical use for credit and the furnishing of this credit by banks is a logical banking function. The securing of funds over and above those normally used to conduct a business on the regular trade terms in order to take advantage of discounts is fundamentally a function of the commercial paper market. A growing business establishing its banking connection will probably be nursed along by its bank and provided with sufficient credit to carry on the ordinary operations of its fabrication, etc. It may not, however, be the policy of the bank of deposit to establish sufficiently large lines so that such a concern may take advantage of all of its trade discounts and this may influence the company in entering the open market. This is done to secure additional funds, the primary object of which is to pay for material purchased and not to carry on bank operations in the carrying of receivables on extended terms offered by the manufacturer himself to his customers. It is further supposed that in purchasing these materials he is going to take advantage of every discount and make every profit and, therefore, it is essential for him to be known in the trade as a discounter if his paper is to float without question in the open market. The writer established as a first principle in the purchase of commercial paper the practise of returning paper taken under option whenever he discovered any indication that the concern was not only not prompt but was not discounting. A company has no right in the open market if it itself is not prompt in paying obligations because that is manifestly a condition in which its operations are extended beyond its ability to pay. Loans are then somewhat frozen and frozen loans are not good commercial paper. This has been narrowed down very largely to the point so that it is not considered proper for a name to be

in the open market that is not in a position to take its discounts let alone ordinary practise of promptness. This is a point for consideration by the executive who puts his paper in the open market, through brokers, and if they are not discounters it is better to have this known and explained to and by the broker, than to have it discovered by the credit man of the bank. This is because open-minded frankness creates a better impression than the suspicion of concealment where it has been necessary to develop the information from the outside.

CHAPTER XVI

General Miscellaneous Items

The discussions in this work have been primarily centralized around a few of the major elements in credit granting. No attempt has been made at padding, and the work has not been written on the basis of a complete discussion of all phases of credit and credit detail. A proper handling of a property statement, a knowledge of the sources of credit information and their uses, and some general knowledge of economics collections, etc., are essential to any credit man. In addition to this we have touched on some phases of purely executive importance in connection with the use of acceptances and in checking collection conditions. There remain a few more or less detached topics that should be discussed in a general way so as to cover the subject of analysis to better advantage. These will be handled in this chapter in a way that is designed to be more suggestive than complete, under the supposition that the average credit men already understand much of the material, and that only suggestion is necessary to throw into relief, perhaps, some of the less definitely appreciated points.

DEPRECIATION

The question of depreciation is a most important one in connection with the analysis of a property statement because of the fact that certain assets are entered at cost and are immediately subject to wear. This wear under varying activities will com-

pletely destroy the value of its assets within a practically known period. The length of life of different classes of assets should be determined by reference to statistics covering the different kinds of machinery, plant, building, etc., and depreciation should be set up against them. The object of this is to provide a fund so that at the end of the time of value, a sufficient reserve will be present to make possible the elimination of the assets from the statements without having to dip into the undivided profits.

There are two ways of handling plant or machinery depreciation. The first of these is to subtract each year from the net investment in these assets, the amount of the depreciation carrying the net amount fully depreciated as an asset. The second way is to carry a depreciation reserve account on the liability side of the statement in which is entered each year the annual amount of the depreciation. Personally, the writer prefers this second method as it involves the entry upon the statement of the cost of the plant machinery, etc., so that at all times its original value is apparent for insurance purposes, etc. The net value of the assets may then be figured as the amount appearing as an asset minus the amount appearing as a depreciation reserve plus or minus any over- or under-depreciation. The writer prefers this as it would evidence to him a better measure of checking up as to the sufficiency of productive insurance in case of fire or other damage insurable against. The net amount being the difference between the apparent asset and the reserve, should approximate the working out liquidating value, although not perhaps junk value.

APPRAISALS

During a period of rising prices the matter of re-appraisement to get a reproduction cost in case of loss by fire or other calamity, the phenomenon of the appraisement value exceeding the

book value has been very often a factor in statement analysis. With the higher cost of materials, labor, etc., it would undoubtedly cost more to reproduce a plant based on the prices and cost of production in 1920 or '21 than it originally cost to erect the plant prior to 1914. This means that in case of destruction by fire and an insurance carried only upon original cost basis, the insurance on cost would be inadequate to reconstruct the plant. Therefore, to establish an insurable value it may be good business to have an appraisal and to carry the plant at the appraisal value if it be in excess of the cost value of the statement.

This increased valuation however, should not, in good credit figuring, appear as an addition to the net worth through surplus accounts. If an increased value appears through appraisals and the plant is carried at the appraised value, then it is good management and good sense to carry as a special reserve depreciation account, "Increased Valuation through Appraisal,"—to indicate that this is not an operating increase, but purely an increase through appraisal.

MERCHANDISE DEPRECIATION

During the years immediately preceding 1920, being a period of rising prices, a considerable number of the more conservatively managed business began to establish depreciation accounts as a protection against possible inventory value fluctuations. During this period, there was, as has been otherwise disclosed, an added extraordinary profit due to the rise in value from the time of the purchase of raw material until the selling of the fabricated product. This rise in value produced a speculative profit in excess of the normal manufacturing profit. Some companies simply acknowledged the presence of this profit and "made a killing" so to speak, declaring extraordinary dividends and branching out

into absurd plant expansion. A few of the more conservatively managed retained a portion of this speculative profit, setting it aside into a special reserve fund for merchandise fluctuation. The logic of this method is uncontrovertible and this procedure is highly recommended. The extent to which this should be carried out is perhaps an indeterminate amount. It seems to the writer that some relationship could be developed between the normal margin of profit per physical unit sold and that all of the profit above this might be considered more or less speculative. The amount of this speculative profit retained in inventory could then to a moderate degree of accuracy, be figured on inventory still held, and it might be good business to retain as a special reserve all extraordinary profits until this amount was sufficient so that when applied to inventory on hand it would satisfy a shrinkage back to normal costs. If this could be done or could even be approached any business would protect itself against the falling price condition which inevitably follows a period of superactivity. Such a concern could take its inventory shrinkage loss without having to dip into its undivided profits or surplus.

OBSOLESCENCE

In the rapid development of manufacture, the development of new machines of a higher degree of efficiency is a moral certainty. An increased unit efficiency of a considerable percentage may easily make it more costly to retain an old machine, although still functioning properly, than to junk it and buy a new machine. If a machine has been figured as depreciating on a ten per cent. annual rate and has been operating for six years, there remains a forty per cent. net value on original cost unprotected by normal depreciation. If at this time a new machine makes its appearance of a sufficiently increased effectiveness, this additional forty per

cent. loss may have to be taken immediately, due to obsolescence. It is impossible to establish an average annual obsolescence charge because the rapidity of inventive genius can not be measured and we can not tell whether or not the effective machine of to-day will be obsolete to-morrow. The importance of obsolescence, however, is none the less present in the credit analysis. It may be that a company is operating with machines that are obsolete, without knowing it and without having established even the reasonable wear and tear depreciation. It is, therefore, important in valuing the non-current assets that the credit man investigate rather closely and secure rather accurate information as to the modernness of the plant investment in order to determine whether during the immediate future his risk is liable to be subjected to a considerable loss through obsolescence as above mentioned. In this work the creditor credit man can often be of protective assistance to the debtor executive in pointing out to him the reasonable advantage of curtailing the disbursement of profits in order to improve and modernize his machinery guarding against this extraordinary loss which might pile up in a dangerous amount, if obsolescence is allowed to creep in without being guarded against.

REPOSSESSION LOSS

In certain lines of business goods are sold on deferred payment, extending at times over a period of three or four or even five years. Title often remains in the name of the seller until final payment is made. Under this arrangement, if the debtor can not keep up his payments the creditor repossesses the goods and in this repossession it is possible that there may be a loss.

An example might be the selling of household furniture on the installment plan. A customer buys furniture on an initial deposit and agrees to pay so much a month. He keeps up his

payments for a few months and for some reason or other is not able to continue them. The creditor then repossesses the goods. This is no longer new merchandise. The varnish may be scratched, the upholstery dirty. They will be cleaned, rubbed and revarnished or furbished up as best may be and will have to be sold as used merchandise. There may be in this a considerable loss. Therefore houses or merchants operating on this basis should be asked definitely concerning the percentage of repossession necessity in connection with total sales and the eventual working out of this repossessed merchandise whether at a loss or otherwise so that this risk may be determined. Under the law of averages it is determinable, but severe economic dislocations may greatly magnify what might be a normal loss. The probability is that in periods of depression lapses of payment would be considerably increased and a greater activity in repossession necessary. The method of guarding against such a loss is so different in different lines of business that no uniform method or percentage can be advanced or advocated. It is merely a question that the creditor credit man should consider with any house selling on deferred payments and concerning which he should be amply informed.

SALES AND LOSSES

It is interesting and instructive to determine over a number of years the loss through bad debts in connection with sales volume. If this is kept up accurately and if a reasonably uniform degree of credit granting policy is present these losses in proportion to sales can be almost exactly standardized. So truly is this the case that there are insurance companies doing a large volume of business insuring against loss through bad debt. They have compiled tables and they have determined the percentages in different lines of business and have evolved a technique in this

matter. In the mind of the writer, it is probably a good policy for the small merchant or manufacturer who has not had credit training to protect himself against bad debt loss by the payment of a premium to a reputable insurance company. On this basis he can establish his bad debt cost. It is his opinion that the larger organization in which credit specialists are at work do not so greatly need this form of protection because their own credit analyst can establish this percentage which could be figured as a cost of operation and insured against within the organization by the arrangement of a reserve for bad debts. There will always be certain losses through bad accounts and, *ipso facto,* there should be reserves set aside to take care of this loss. The presence or non-presence of such a reserve should be a matter of prime importance in the investigation and analysis by the careful credit grantor.

TAXES

An extremely irrational practise has been apparent in connection with the handling of tax reserves. Far too many property statements are issued showing assets and liabilities without any arrangement being made to take care of taxes. Other property statements make their appearance with the taxes figured as reserves along with, and sometimes within, the ordinary depreciation reserve accounts. There can be nothing more current in a debt nature than the tax. If there is one certain sure debt that has got to be paid it is the tax. It can not be deferred, it can not be put off, notes can not be given for it. It must be paid. Therefore, the issue of any statement without the setting aside and carrying as a liability of an amount approximately sufficient to liquidate the tax at tax time is not an accurate statement from the credit standpoint.

An amusing practise has been to deduct the tax from the sur-

plus and not have it appear, therefore, as a liability. While the tax will, of course, be paid by a deduction from surplus the book deduction thereof does not create a cash asset with which to pay it. It is the opinion of the writer that a sinking fund for tax purposes would be a proper method of taking care of this item. If a concern figures that its taxes are to be sixty thousand dollars the charge per month is five thousand dollars. Therefore, if five thousand dollars were invested each month from undivided profits in prime securities, such as bankers' acceptances, and this fund kept intact until tax time, the strain of the tax period might be somewhat relieved because the active funds would be present and borrowing would not have to be the procedure. Under the present method an amount is taken out of undivided profits and set up among the reserves as a tax reserve. The wily credit man moves this tax reserve up into the current liability. At tax time the executive transforms this reserve into bills payable in too many instances. The proper procedure would be to have each month carry its own tax burden in the development of a sinking fund from which to make payments. This is just as logical as the development of a sinking fund to take care of a bond issue or otherwise and should be a matter of budgetary control.

PATENTS

When a patent right is issued and when it is purchased, the length of the unused time of the patent right is determinable. If this be ten years, then at the end of ten years the patent right protection vanishes. This would mean that ten per cent. of the patent right valuation as an asset should be charged off each year. Some executives argue that during the ten years a monopoly in the market may be established through national advertising, and establishing a nationally known and accepted brand, that offsets

this depreciation. This may or may not be so but a patent right, as a patent right, is of no value after the expiration of the patent right period. Therefore, if it is to be carried as an asset it should be carried for what it is,—good will or otherwise—and not as a patent right.

In some instances this patent right proposition has been curiously evaded by the incorporation of a separate corporate entity in which the patent right is the sole asset. The stock of this subsidiary is then sometimes carried among stocks and bonds and investments in the hope that it will slip by and be allowed, not only as a perfectlv good, but perhaps as current asset. It is interesting to watch for this occasion.

CREDIT ETHICS

The writer can not close a discussion of credit without dwelling on the ethics of the profession. Character has been advanced as the prime essential for the establishment of a credit standing. Character is also a prime essential for the establishment of a standing by a credit man so that other credit men may cooperate with him in helping him to protect his house against loss. Unethical handling of credit information jeopardizes this position. There are still some credit men so small-minded and so mean of spirit that they wish to unload their bad risks by giving them a credit standing, in answer to inquiries, above their true standing. The credit man who unloads a lemon on a brother credit man through an unethical handling of information is beneath contempt. The credit man who abuses information given to him is possibly still further down in the scale. A good deal of criticism has been directed against the information given by bank credit men because they have been very conservative having found that the ethics of credit men in the handling of infor-

mation given to them have not been of the highest. It is uncomfortable, and jars one's confidence in mankind considerably, to have your answer to an inquiry laid down before you by the subject when you have said something uncomplimentary about him in an effort to protect a fellow credit man. Yet this is a very frequently occurring event and has done more to prevent true cooperation than almost any one factor working to-day in the credit field.

The writer takes the liberty of closing these more or less random opinions and remarks on credit and the science thereof by quoting the *Code of Ethics* adopted by a serious-minded body of bank credit men operating under the name of The Robert Morris Associates. Any credit man following this *Code of Ethics,* and being recognized as being unswerving in his following thereof, will without doubt secure the fullest cooperation from both his commercial and banker brethren.

CREDIT DEPARTMENT ETHICS

The first and cardinal principle in credit investigation is the sacredness of the replies.

Any betrayal of the confidence implied when credit information is given brands the offender unworthy of consideration or confidence.

Indiscriminate revision of files, when there is no real need of information, is unnecessary, wasteful and undesirable.

Every letter of inquiry should indicate in some definite and conspicuous manner the object and scope of the inquiry.

When more than one inquiry on the same subject is sent simultaneously to banks in the same city, this fact should be plainly set forth in the inquiries.

If form letters are used in making inquiries it is good practise to have them bear the manual signature of the inquirer to establish responsibility.

In seeking information, the name of the inquirer, in whose behalf the inquiry is made, should not be disclosed without permission.

The recipient of a credit inquiry who urges his correspondents to make plain the object and scope of their investigation fails in his duty if he neglects to read carefully each special letter of inquiry and to answer frankly specific questions therein.

In answering inquiries it is advisable to disclose all material facts bearing on the credit of the subject because full understanding is always necessary and because all paper offered should be of the same description as that held by the borrower's own bank.

In answering inquiries the source of the information should not be disclosed without permission.

It is not permissible or the part of good faith, in soliciting accounts from a competitor, to seek information from the competitor without frankly stating the object of the inquiry.

THE END